# Career

An Occupational Handbook
for Nova Scotia

1988 edition

Nova Scotia
Department of
Advanced Education
and Job Training

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# CAREER OPTIONS

## AN OCCUPATIONAL HANDBOOK FOR NOVA SCOTIA

1988 EDITION

**Nova Scotia Department of**
**Advanced Education and Job Training**

**Planning And Evaluation Division**

**HONOURABLE EDMUND L. MORRIS**
**MINISTER**

**J.H. CLARKE**
**DEPUTY MINISTER**

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## Preface

**Career Options, An Occupational Handbook for Nova Scotia**, was developed and produced by the Planning and Evaluation Division of the Nova Scotia Department of Advanced Education and Job Training. The purpose of the handbook is to provide students and other individuals with a brief synopsis of the basic labour market information associated with the major occupational groups in the Province.

Numerous individuals and organizations contributed to the preparation of **Career Options**. We would particularly like to thank the many employers, business associations, professional associations and career counsellors that provided useful comments on earlier drafts of the document. Some of these groups have also allowed us to provide their name and address as a source of further information on particular occupations. It should be noted that the inclusion of an organization's name does not necessarily imply their endorsement of the information contained in the handbook, nor does it imply the Department's endorsement of the organization.

We would also like to thank the Program Development and Youth Initiatives Divisions of the Department of Advanced Education and Job Training for their assistance in preparing many of the occupational descriptions contained in the document.

Occupational forecasts presented in **Career Options** are based on an updated version of the 1987 Provincial Scenario of the Canadian Occupational Projection System (COPS). COPS is a computerized occupational forecasting system developed and maintained by Employment and Immigration Canada (EIC). The Provincial Scenario was developed jointly by the Nova Scotia Regional Office of Employment and Immigration Canada (Economic Services Division), the Nova Scotia Department of Industry, Trade and Technology, and the Nova Scotia Department of Advanced Education and Job Training.

Descriptions of the principal duties associated with an occupation were derived from various sources, including the Canadian Classification and Dictionary of Occupations (CCDO) and Statistics Canada's Standard Occupational Classification. A full bibliography of all sources used in the preparation of **Career Options** is included.

## A Note to Students

The purpose of **Career Options** is to provide some basic labour market information on the major occupational groups in Nova Scotia. This information is intended to assist you in the difficult and somewhat perplexing task of choosing or changing a career. For many people, choosing a career is very much a hit and miss affair. Some individuals take the first opportunity that presents itself without considering or being aware of the alternatives. Clearly, this should not be the case.

One of the main elements in making a career choice is an awareness of the available options. This handbook will introduce you to the broad variety of occupations that exist in the Nova Scotia economy, in order that you may begin to think about the type of occupation that best suits your own unique combination of skills, abilities, interests and personal aspirations.

**Career Options** is essentially a catalogue of career opportunities in Nova Scotia. It is not an in-depth review of each occupation in the Province. In using **Career Options** it is suggested that you browse through the handbook, locate a number of occupations in which you are interested (and hopefully discover a few that you had not previously considered), and obtain the basic information associated with these occupations from the handbook. You should then obtain more in-depth information about these occupations from sources such as career counsellors, individuals currently working in the occupation, firms or associations related to the occupation, and other career counselling documents.

For each of the 150 occupational groups covered in **Career Options** a variety of descriptive and statistical information has been presented which relate specifically to the Province of Nova Scotia. The descriptive information includes a summary of the nature of the work performed by individuals in the occupation, the minimum qualifications and/or experience required, a list of the schools, universities and/or colleges that provide related training, and an indication of the most common skills and/or aptitudes associated with the occupation. The statistical information includes estimates of employment and unemployment levels for each occupation, projected employment growth from 1987 to 1995, and estimated earning levels in 1987.

A user's guide to the information contained in **Career Options** is presented in the section entitled "How to Use Career Options". You are strongly advised to read this section before proceeding to the information sheets on specific occupations.

It should be noted that while the employment forecasts presented in this document are considered to be accurate at time of printing, nobody can predict the future with certainty. These forecasts should, therefore, be considered as an *estimate* of future requirements based on current knowledge.

We hope that this handbook will help you in your search for a career that is both interesting and rewarding and we wish you every success in this endeavour.

## A Note to Counsellors

**Career Options** is an occupational handbook prepared specifically for the Nova Scotia labour market. The handbook has two major objectives; (1) to introduce students and other individuals to the broad range of career options that exist in Nova Scotia, and (2) to provide basic labour market information on the major occupational groups in the Province.

**Career Options** is essentially a catalogue of career opportunities in Nova Scotia. It is not an in-depth review of each occupation in the Province. Ideally, the handbook will be used *directly* by students and other individuals in reviewing career prospects. To this end, the information in the handbook has been kept as short and simple as possible. Students should browse through **Career Options**, locate a number of occupations in which they are interested (and hopefully discover a few that they had not previously considered), obtain the basic information from the handbook, and then go on to get more in-depth information for these occupations from other sources such as career counsellors, individuals currently working in the occupation, firms or associations related to the occupation, and other career counselling documents.

In order to cover as broad a range of occupations as possible in **Career Options** over 400 specific occupations as defined by the Canadian Classification and Dictionary of Occupations (CCDO) at the four-digit level were clustered into 150 major occupational groups. This clustering of occupations involved the combination of specific four-digit CCDO occupations into occupational groups on the basis of skill,education, and training requirements. For cross reference purposes each occupational group was assigned an alpha-numeric code ranging from A00 to V33.

Each of the 150 occupational groups contains at least one and as many as fifty specific four-digit CCDO occupations. Typically, the more highly skilled occupational groups contain fewer specific four-digit CCDO occupations while the lower skilled occupations may contain many specific four-digit occupations. For example, occupation group V13, Mechanical Engineers, contains only one specific four-digit CCDO occupation, Mechanical Engineer, CCDO # 2147, while occupation group A00, General Labouring, High Strength, contains twenty nine specific four-digit occupations. On average, there are approximately three four-digit CCDO occupations per occupational group.

A complete listing of all 150 occupational groups along with their associated four-digit CCDO occupations is presented in Appendix A. In addition, a complete listing of the four-digit CCDO occupations contained in **Career Options**, along with their associated occupational group code, is presented in Appendix B. The index at the back of the book provides a full listing in alphabetical order of all occupations covered in **Career Options**.

A users guide, "How to Use Career Options", is included in the beginning of Career Options. This guide is intended primarily for use by students. For the assistance of counsellors and other interested individuals, a more thorough explanation of the data contained in the handbook is provided in Appendix C, Data Sources and Notes.

This is the first edition of Career Options. While every effort was made to ensure the accuracy of the data contained in the handbook, errors and omissions will inevitably occur. Comments and suggestions for future versions of the document are welcome and should be forwarded to:

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B3J 3B7

# HOW TO USE
# CAREER OPTIONS

# P01 ELECTRONIC TECHNICIANS AND TECHNOLOGISTS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2165 | Engineering Technicians and Technologists |
| 8735 | Wire Communications and Related Equipment Installing and Repairing |
| 8537 | Radio and Television Service Repairers |
| 8535 | Electronic and Related Equipment Installing and Repairing Occs., N.E.C. |
| 9551 | Radio and Television Broadcasting Equipment Operators |

**Principal Duties** This occupational group involves occupations related to the electronics industry concerned with carrying out various technical and technological functions. Activities may include operating, installing and repairing radio and television transmitters; business and commercial machines; scientific, engineering, optical and medical instruments and apparatus; and photographical, meteorological and similar equipment.

**Requirements** Individuals in this occupation are generally required to possess a certificate or diploma in Electronics from a recognized institute. While certification is not mandatory, increasingly employers are demanding it as part of their employment requirements.

**Training Paths** Courses in Electronics Engineering Technology are available through a two-year program at the Nova Scotia Institute of Technology in Halifax or the University College of Cape Breton in Sydney. A second alternative is a twelve-month course offered at the Adult Vocational Training Centres in Cape Breton and Dartmouth. In addition, two-year Electronics programs are offered at several of the Provinces regional vocational schools. As a final alternative, a two-year marine electronics course is offered at Burridge Regional Vocational School. Completion of the twelfth grade or its equivalent with a strong standing in mathematics and physics is generally specified as the pre-requisite for acceptance into these programs.

**Skills/Aptitudes** Individuals are required to have the ability to understand principles of electronics and mechanical operations. They are required to perform intricate work with their hands and must have good motor skills and manual dexterity. Individuals must be able to collaborate and cooperate with others as they will often be involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **4390**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **250**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 30000**

**For Further Information Contact**

Society of Certified Engineering Technologists & Technicians in N.S.
63 Portland Street, Ste. 1
Dartmouth, N.S.
B2Y 1H1

## HOW TO USE CAREER OPTIONS

### Locating an occupation in Career Options

In order to locate information on a particular occupation within **Career Options** you may refer to the alphabetical listing of occupations contained in the main index located at the back of the handbook. For example if you want to find information on Electronic Technicians and Technologists simply look up this title in the index and go to the page indicated (page 71 for Electronic Technicians and Technologists). You will notice from page 71 that this occupational group contains five specific occupations related to Electronics at the technical level. As the emphasis in **Career Options** has been to cover as broad a range of occupations as possible, occupations with similar skills and educational requirements have been combined. A complete list of the occupations contained in each occupational group is provided in Appendix A.

### Explanation of Information Contained in Career Options

For the purpose of this explanation, the information sheet on the occupational group Electronic Technicians and Technologists will be used as an example. For convenience, the information sheet on this occupation appears directly opposite this page. Information on all other occupations follow a similar format to this example.

**Occupation Title** The title of the occupational group appears on the top of each page in **Career Options** (Electronic Electricians and Technologists in our example). The title is preceded by a three character code (P01 in our example) which can be used in conjunction with Appendix A to determine the specific occupations contained in the occupational group.

**Most Significant Occupations in This Group** This lists the most significant occupations included in the particular occupational group. Each of the 150 occupational groups contained in **Career Options** is comprised of at least one and as many as fifty specific occupations. This section lists up to five of the largest occupations in each group in decreasing order of 1987 employment levels. Where there is only one occupation in an occupational group, this section is omitted. Each specific occupation title is preceded by a four-digit number called the CCDO #, which is the code number assigned to the occupation by the Canadian Classification and Dictionary of Occupations (CCDO). This number can be used to reference other sources of information on a specific occupation.

**Principal Duties** details the basic types of work performed by individuals in the occupation. For the occupational group Electronic Technicians and Technologists these duties may include operating, installing and repairing a wide range of electronic equipment.

**Requirements** indicates the education and/or level of training required in order to obtain employment in the occupation. In the case of Electronic Technicians and Technologists, a certificate or diploma in Electronics from a recognized training institute is generally required.

**Training Paths** lists the institutes which provide the education and/or training an individual should acquire in order to obtain work in the particular occupation. The *minimum* requirements for admission into the relevant training programs are also listed. Training programs for Electronic Technicians and Technologists, for example, are provided by several institutions in Nova Scotia including the Nova Scotia Institute of Technology, the University Collage of Cape Breton, the Adult Vocational Training Centers, and at several of the Province's Regional Vocational Schools.

**Skills/Aptitudes** details the skills and aptitudes normally associated with the particular occupation. Electronic Technicians and Technologists are generally required to have good diagnostic skills and manual dexterity.

**Nova Scotia Labour Market Conditions** Several key labour market statistics on employment and unemployment levels for the particular occupational group are listed under this heading. Employment numbers are rounded to the nearest 10 and earnings are rounded to the nearest 1000. N/A implies that data was not available.

**Number of People Employed** indicates the estimated number of people employed in the occupational group in 1987. In the case of Electronic Technicians and Technologists, employment is estimated at 4,390 for 1987.

**Employment growth between 1987 and 1995 is projected to be:** This line indicates the relative employment growth rate from 1987 to 1995 for the particular occupational group in comparison to all occupations within the Nova Scotia economy. The employment growth level may be termed average, above average, or below average. Employment growth for Electronic Technicians and Technologists is projected to be average from 1987 to 1995.

**Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at:** This line indicates the projected average number of new job openings per year from 1987 to 1995 in the particular occupational group. New job openings are projected to occur due to new employment growth (new firms opening and existing firms expanding) and due to occupational attrition (occupational attrition results from existing workers either retiring, moving to another province or country, or moving to another occupation). This latter factor of occupational attrition is responsible for the majority of new job openings in Nova Scotia and in all developed economies. The average number of new job openings over the period for Electronic Technicians and Technologists is estimated at 250 per year. It should be noted that competition for these job openings may come from a variety of sources including: new graduates from education and or training programs, qualified individuals in the occupation who are currently unemployed, qualified individuals moving to Nova Scotia from other provinces or countries, and qualified individuals changing occupation.

**The Unemployment Rate during the third quarter of 1987.** This line indicates the relative unemployment rate for the particular occupational group during the third quarter (September) of 1987 in comparison to all occupational groups in Nova Scotia. The unemployment rate is calculated on the basis of Unemployment Insurance Beneficiary data and may be termed either average, above average, significantly above average, below average, or significantly below average. The unemployment rate for Electronic Technicians and Technologists as of the third quarter 1987 was significantly below average.

**Estimated Annual Earnings in 1987** indicates the estimated average annual earnings of full-time, full-year workers in the occupational group as of 1987. *It is noted that this figure is the average for all people in the occupation. Starting wages are generally significantly below this figure.* Earnings in 1987 are calculated on the basis of 1980 earnings adjusted for estimated income increases over the period. It is estimated that Electronic Technicians and Technologists who worked full-time for the full year earned an average of $30,000 in 1987.

**For Further Information Contact** Whenever possible, the address of an organization related to the occupation is provided as a source of further information. Individuals interested in becoming Electronic Technicians or Technologists, for example, could contact the Society of Certified Engineering Technologists and Technicians in Nova Scotia.

# OCCUPATIONAL DESCRIPTIONS

# AND

# LABOUR MARKET STATISTICS

# A00 GENERAL LABOURING, HIGH STRENGTH

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 9313 | Longshore workers, Stevedores and Freight Handlers |
| 8798 | Occupations in Labouring and Other Elemental Work |
| 7513 | Timber Cutting and Related Occupations |
| 7199 | Other Farming Horticultural and Animal-Husbandry Occs., N.E.C. |
| 9318 | Occs. in Labouring and Other Elemental Work, Material Handling, N.E.C. |

**Principal Duties** This occupational group encompasses a wide variety of general labouring occupations requiring a high level of strength and physical endurance. Examples include labourer, mining; construction labourer; longshoreman; and timber cutter.

**Requirements** There are no formal requirements for the majority of occupations within this group, other than a minimum age of sixteen years.

**Training Paths** Training for these occupations is generally in the form of on-the-job training provided by the employer.

**Skills/Aptitudes** Individuals in these occupations should have good physical health and strength and be able to carry out instructions given by a supervisor.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **14250**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1420**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# B00 GENERAL LABOURING, LOW STRENGTH

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6191 | Janitors, Charworkers and Cleaners |
| 8217 | Fish Canning, Curing and Packing Occupations |
| 6198 | Occupations in Labouring and Other Elemental Work, Services |
| 7195 | Nursery and Related Workers |
| 5145 | Service Station Attendants |

**Principal Duties** This occupational group encompasses a wide variety of general labouring occupations which do not require a high degree of strength. Examples include service station attendant, chambermaid, and street vendor.

**Requirements** There are no formal requirements for the majority of occupations within this group, other than a minimum age of sixteen years.

**Training Paths** Training for these occupations is generally in the form of on-the-job training provided by the employer.

**Skills/Aptitudes** Individuals in these occupations should have good physical health and be able to carry out instructions given by a supervisor.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **24700**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **2740**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 17000**

# C00 ELEMENTAL, MACHINE RELATED, INDOOR

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 9317 | Packaging Occupations, N.E.C. |
| 8563 | Sewing Machine Operators, Textile and Similar Materials |
| 8149 | Metal Processing and Related Occupations, N.E.C. |
| 6162 | Laundering Occupations |
| 8215 | Slaughtering and Meat Cutting, Canning, Curing and Packing Occupations |

**Principal Duties** This occupational group encompasses a wide variety of machine related occupations which do not require a high degree of formal training and which involve work performed inside a home, building, or other structure. Examples include packaging, laundering, and sewing machine operations.

**Requirements** There are no formal requirements for the majority of occupations within this group, other than a minimum age of sixteen years.

**Training Paths** Training for these occupations is generally in the form of on-the-job training provided by the employer.

**Skills/Aptitudes** Individuals in these occupations should have good physical health and be able to carry out instructions given by a supervisor.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **9550**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1060**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 19000**

# D00 ELEMENTAL, MACHINE RELATED, OUTDOOR

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8711 | Excavating, Grading and Related Occupations |
| 7717 | Mining and Quarrying: Cutting, Handling and Loading Occupations |
| 9315 | Material-Handling Equipment Operators, N.E.C. |
| 9311 | Hoisting Occupations, N.E.C. |
| 8713 | Paving, Surfacing and Related Occupations |

**Principal Duties** This occupational group encompasses a wide variety of machine related occupations which do not require a high degree of formal training and which generally involve work performed out-of-doors. Examples include mining-cutting; excavating; hoisting; and material handling.

**Requirements** There are no formal requirements for the majority of occupations within this group, other than a minimum age of sixteen years.

**Training Paths** Training for these occupations is generally in the form of on-the-job training provided by the employer.

**Skills/Aptitudes** Individuals in these occupations should have good physical health and strength and be able to carry out instructions given by a supervisor.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **5620**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **510**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

# E00 SEMI-SKILLED, MACHINE RELATED, INDOOR

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8541 | Cabinet and Wood Furniture Makers |
| 9512 | Printing Press Occupations |
| 8179 | Chem., Petro., Rubber, Plastic, Rel. Materials Processing Occ., N.E.C. |
| 9519 | Printing and Related Occupations, N.E.C. |
| 8315 | Machine Tool Operator |

**Principal Duties** This occupational group encompasses a wide variety of machine related occupations which do not require a high degree of formal training and which generally involve work performed inside a building, office, or other structure. Examples include machine tool operators; printing press operators; and cabinet makers.

**Requirements** There are no formal requirements for the majority of occupations within this group, other than a minimum age of sixteen years.

**Training Paths** Training for these occupations is generally in the form of on-the-job training provided by the employer.

**Skills/Aptitudes** Individuals in these occupations should have good physical health and be able to carry out instructions given by a supervisor.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **3040**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **330**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# F00 SEMI-SKILLED OCCUPATIONS, NOT ELSEWHERE CLASSIFIED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6115 | Guards and Related Security Occupations |
| 4172 | Mail Carriers |
| 3375 | Attendants, Sport and Recreation |
| 4191 | Collectors |
| 8786 | Insulating Occupations, Construction |

**Principal Duties** This occupational group encompasses a wide variety of occupations, not elsewhere classified, which do not require a high degree of formal training. Examples include cashiers and tellers; guards and watchmen; mail carriers; and railway conductors.

**Requirements** There are no formal requirements for the majority of occupations within this group, other than a minimum age of sixteen years.

**Training Paths** Training for these occupations is generally in the form of on-the-job training provided by the employer.

**Skills/Aptitudes** Individuals in these occupations should have good physical health and be able to carry out instructions given by a supervisor.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **6960**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **730**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 19000**

# G00 WAITERS/WAITRESSES AND BARTENDERS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6125 | Food and Beverage Serving Occupations |
| 6123 | Bartenders |

**Principal Duties** This occupational group includes a variety of occupations concerned with the following duties: reserving and arranging dining tables; welcoming and seating customers; providing menus; taking orders; mixing drinks; and serving food and beverages in formal and informal settings in such places as hotels, restaurants, clubs, cocktail lounges, and cafeterias.

**Requirements** Typically, there are no formal requirements for individuals in these occupations. There are, however, a number of programs available in the Province which provide training in these areas. In Nova Scotia, a person must be nineteen years of age to work in a licensed establishment.

**Training Paths** Often a bartender will begin as a waiter/ waitress or bus person and learn bartending at the workplace. However, there are a number of programs available for those who desire more formal training. The Nova Scotia Institute of Technology in Halifax in cooperation with Canada Employment Centres offers a five-week course in bartending and a seven-week course in waiter/waitress dining service. Completion of the eighth grade or its equivalent is recommended. A one-year course in dining room services is available at Dartmouth Regional Vocational School and at Memorial High Shool. The minimum entrance requirement for this course is grade nine. A course in bartending theory is offered through the Department of Continuing Education, Halifax District School Board.

**Skills/Aptitudes** Individuals in this occupation are in constant contact with the public. They must be friendly and pleasant to both their customers and their co-workers. Good organizational skills, the ability to remember details and orders, and the ability to move gracefully and quickly are also important. Must be flexible in terms of hours and days worked as much shift work is required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **7180**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1320**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 13000**

**For Further Information Contact**

Nova Scotia Restaurant and Food Services Association
P.O. Box 3128, South
Halifax, N.S.
B3J 3G6

# G01 HOME CARE AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6147 | Child Care Occupations |
| 6149 | Personal Service Occupations, N.E.C. |

**Principal Duties** This occupational group includes a wide variety of occupations, not elsewhere classified, involved in supplying personal services directly to individuals or groups. Duties may include: rendering housekeeping services in private homes; receiving guests; attending to personal needs of employer; performing domestic and maintenance duties; and acting as a companion to elderly, handicapped or recuperating persons.

**Requirements** There are no formal requirements to work in these occupations.

**Training Paths** The primary method of training for these jobs in Nova Scotia is through on-the-job training. Short courses do exist for some occupations such as babysitting through the Atlantic School of Nannies in Bedford. Canada Employment Centres often sponsor courses in occupational areas. Contact your local office for more information on the specific courses offered.

**Skills/Aptitudes** Individuals in these occupations should enjoy very repetitive and routine types of work. The ability to communicate well with others, especially groups of people, is a definite asset. A neat, well groomed appearance is required as are good manners and politeness. Many of these occupations require that employees work quickly and efficiently in order to complete all tasks on time.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **5900**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1290**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# G02 GUIDES, HOSTESSES AND STEWARDS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6144 | Guides |
| 6145 | Travel and Related Attendents, Except Food and Beverage |

**Principal Duties** This occupational group includes a variety of occupations concerned with providing assistance to travellers and tourists. Duties may include escorting individuals or groups on travel tours and excursions, arranging recreational activities, and attending to the comfort of passengers on air planes, ships or trains.

**Requirements** While there are no formal requirements to work in these occupations, employers are increasingly looking for individuals with related training. Air line stewards/stewardesses are generally required to be bilingual and to have completed the twelfth grade.

**Training Paths** Training in these occupations is generally provided on-the-job by the employer. A course entitled Travel and Tourism Counsellor is available through the Maritime Business College in Halifax. This is a six-month program which requires the completion of the twelfth grade for admission.

**Skills/Aptitudes** Individuals in these occupations should enjoy working with people and be patient and understanding. The ability to speek more than one language would be a definite asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **470**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **50**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# G03 OTHER SERVICE OCCUPATIONS, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group includes occupations, not elsewhere classified, concerned with providing services, such as underwater diving; fumigating buildings for pest control; acting as attendant or valet in parking lots; taking admission tickets; providing social dating services; caring for church buildings and furnishings; and cleaning laboratory equipment.

**Requirements** There are no formal requirements for entranceinto any of these occupations except for divers who require a Certificate in Underwater Skills.

**Training Paths** Training for all occupations in this group, except divers, is through on-the-job training under the supervision of a more experienced employee. Divers must first obtain their certificate as a sports scuba diver which takes six weeks at the Nautilus School of Diving in Halifax. Then, further training must be obtained at either Seneca College or the Canadian Underwater Training Council, both in Toronto. These are one year courses which require grade twelve with english, math and physics courses. Successful completion of these courses allows the individual to be employed as a commercial diver.

**Skills/Aptitudes** Except for divers, individuals in these occupations should enjoy repetitive and routine tasks. Due to the diversity of occupations in this group, specific information should be obtained from other sources.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **350**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

# G04 HAIRDRESSERS AND RELATED OCCUPATIONS

**Principal Duties** This occupational group is concerned with such activities as cutting, shampooing, colouring, weaving, and styling hair; cleaning, shaping and polishing finger and toe nails; applying cosmetics; and providing other beauty treatments to change the appearance of individuals.

**Requirements** While most hairstylists have either a General or Masters License, the minimum requirement is a Junior Certificate, which is issued after passing an examination given by the Association of Nova Scotia Hairdressers. There are no such requirements for barbers.

**Training Paths** Training in these areas is provided at several vocational and private trade schools throughout the Province. The length of these courses is either one or two years with the minimum entrance requirement typically being Nova Scotia grade ten or its equivalent. After a student has obtained the Junior Certificate, an additional 960 hours of practical work experience qualifies the individual for a General License. A Masters License is available for those holding a General License for at least two years.

**Skills/Aptitudes** Individuals in these occupations should possess good interpersonal skills, be able to follow directions closely, and be imaginative and creative.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **5000**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **580**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 14000**

**For Further Information Contact**

Association of Nova Scotia Hairstylists
63 Portland St., Suite 1
Dartmouth, N.S.
B2Y 1H1

# G05 HOTEL CLERK

**Principal Duties** This occupational group is concerned with accommodating hotel customers by performing any combination of the following duties: registers guests; issues room key and instructions to bellboy; receives, delivers or forwards packages, baggage, freight, and other items for hotel guests; responds to enquiries regarding hotel services and registration of guests; handles guests' complaints; makes and confirms reservations; gives statements to departing guests; and collects payment.

**Requirements** There are no formal requirements for entry into this occupation, however, many hotels may require the completion of a hotel management course.

**Training Paths** Training for this occupation is provided through a two-year Hotel/Motel/Restaurant Management course offered at the Dartmouth Regional Vocational School and the Hospitality Administration course offered at the University College of Cape Breton. Completion of the twelfth grade is required for both courses. In smaller establishments training may be provided on-the-job.

**Skills/Aptitudes** Individuals should possess good interpersonal and communication skills. A neat appearance and a friendly, helpful manner are important. A good memory for names and faces is a definite asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **320**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 15000**

**For Further Information Contact** a local hotel or hotel clerk in your area

# G06 SALES CLERK

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 5137 | Sales Clerks, Commodities |
| 4133 | Tellers and Cashiers |
| 5135 | Sales Workers, Commodities, N.E.C. |

**Principal Duties** This occupational group is concerned with conducting sales in wholesale or retail businesses. Responsibilities include displaying merchandise, marketing equipment and providing technical information about commodities, preparing sales slips, and taking stock in designated areas, or selling and demonstrating merchandise in wholesale and retail trade establishments and homes, on the street and door-to-door. Duties may involve training, directing and coordinating the activities of other workers.

**Requirements** There are no formal requirements for entry into this occupation.

**Training Paths** The usual path into this occupation is through on-the-job training with an employer. However, there is a one-year course available entitled Retail Sales/Merchandising. This course is offered at various Regional Vocational Schools throughout the province. Completion of the tenth grade or its equivalent is required for entry. Individuals interested in supervisory positions should consider this option.

**Skills/Aptitudes** Individuals in this occupation should possess good interpersonal and communication skills. They should always be alert to the customer's needs and be as helpful and efficient as possible. A working knowledge of other languages especially French is an asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **29020**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **4830**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 19000**

# H00 DRIVING, TRUCKING, AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 9175 | Truck Drivers |
| 9171 | Bus Drivers |
| 9173 | Taxi Drivers and Chauffeurs |
| 9179 | Motor Transport Operating occupations, N.E.C. |
| 9170 | Supervisors, Motor Transport Operating Occupations |

**Principal Duties** This occupational group is concerned with operating buses, trucks, taxis, automobiles and similar vehicles to carry passengers, goods or materials over short or long distances.

**Requirements** Individuals in these occupations must possess a valid driver's license at the level required for the particular vehicle driven. Bus drivers and taxi drivers must be nineteen years of age, have one year of driving experience, and take a test for their chauffeur's license.

**Training Paths** Licensing is done by the Provincial Department of Transportation. Bus drivers must have a class two license and taxi drivers a class four. Drivers of freight- and cargo-carrying vehicles must have a class one license. The Commercial Safety College in Truro offers a number of courses beneficial to individuals in these occupations.

**Skills/Aptitudes** Individuals in these occupations should enjoy driving, possibly over extended periods of time and long distances.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **11000**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1150**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 23000**

**For Further Information Contact**

Atlantic Provinces Trucking Association
567 Coverdale Road, Suite 7A
Riverview, New Brunswick
E1B 3K7

# I01 ENGINE CREW-SHIP

**Principal Duties** This occupational group is concerned with tending boilers aboard ships, lubricating and assisting in the repair of engines and other equipment, and cleaning engine-room machinery.

**Requirements** Individuals seeking employment in this occupation are required to possess certification as an engineer cadet.

**Training Paths** Training is provided through the Nova Scotia Nautical Institute in Halifax. Entrance into this ten-month course requires grade twelve with good standing in math, physics and science along with good sight and colour vision.

**Skills/Aptitudes** In this occupation individuals should be able to carry out, receive and communicate verbal instructions and work under minimal supervision in confined spaces, exposed to noise, heat and vibration.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **160**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Canadian Offshore Vessel
Operators Association
P.O. Box 5549
St. John's, Nfld.
A1C 5W4

# I02 WATER TRANSPORTATION, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group is concerned with water transport activities. Responsibilities include operating ship's communications equipment; operating lighthouses, inland waterway and canal systems, drawbridges, motorboats and cable ferries.

**Requirements** There are no formal training or certification requirements for entrance into these occupations.

**Training Paths** Individuals entering these occupations receive the bulk of their training through on-the-job work experience.

**Skills/Aptitudes** Individuals interested in these occupations should enjoy working outdoors close to the sea or other waterways.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **160**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# I03 DECK CREW, SHIP

**Principal Duties** This occupational group is concerned with carrying out deck and bridge duties aboard vessels that transport passengers, goods and materials, tow ships, barges or log booms. Duties may include supervising and organizing activities of deck crew, steering the ship as instructed by a deck officer, standing deck watches, and maintaining the ship's structural woodwork, wooden gear and deck equipment.

**Requirements** Individuals seeking employment in this occupation are required to possess certification as a navigation cadet.

**Training Paths** Training is provided through the Nova Scotia Nautical Institute in Halifax. Entrance into this ten-month course requires grade twelve with good standing in math and physics along with good sight and colour vision.

**Skills/Aptitudes** In this occupation individuals should be able to carry out, receive and communicate verbal instructions and work under minimal supervision in confined spaces.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **700**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **60**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Canadian Offshore Vessel
Operators Association
P.O. Box 5549
St. John's, Nfld.
A1C 5W4

# I04 ENGINE OFFICERS, SHIP

**Principal Duties** This occupational group is concerned with scheduling, organizing and supervising the activities of the engine-room crew aboard ships. Responsibilities include operating and servicing main engine boilers, steering and deck machinery, motors, pumps, generators, condensers and other mechanical and electrical equipment.

**Requirements** Individuals seeking employment in this occupation are required to possess marine engineering certification.

**Training Paths** Training is provided through the Nova Scotia Nautical Institute in Halifax. Students may progress through the officer levels from 4th Class to 1st Class based on the accumulation of sea time and classroom experience. The duration of the course depends on the candidate's ability and effort. Entrance to the 4th Class level requires certification as a marine engineering cadet plus 29 months of sea time.

**Skills/Aptitudes** Individuals in this occupation should possess strong leadership skills and a valid eyesight test certificate.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **430**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$38000**

**For Further Information Contact**

Canadian Offshore Vessel
Operators Association
P.O. Box 5549
St. John's, Nfld.
A1C 5W4

# I05 DECK OFFICERS

**Principal Duties** This occupational group is concerned with managing and operating vessels on oceans or coastal and inland waters. Responsibilities include planning, coordinating and supervising the activities of the crews, controlling, steering and navigating the vessel, directing and supervising dredging operations, safeguarding passengers, crew and cargo, and piloting the vessel in rivers, harbours and other confined and hazardous waters.

**Requirements** Individuals seeking employment in this occupation are required to possess certification in Ocean Navigation.

**Training Paths** Training is provided through the Nova Scotia Nautical Institute in Halifax. Students may progress through the officer levels from Ocean Navigation II to Ocean Navigation I to Master Mariner based on certification at the previous level and with the accumulation of sea time. Entrants into the six-month ocean navigation course requires one year of sea time while holding a Watchkeeping Mate certificate.

**Skills/Aptitudes** Individuals in this occupation should possess strong leadership skills and a valid eyesight test certificate.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **420**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 41000**

**For Further Information Contact**

Canadian Offshore Vessel
Operators Association
P.O. Box 5549
St. John's, Nfld.
A1C 5W4

# I06 FISHERMAN/WOMAN

**Principal Duties** This occupational group is concerned with catching fish in coastal, inland or deep sea waters, using lines or nets. Activities may include repairing nets, sorting, cleaning and stowing the catch in the hold, and unloading the catch at the dock as well as repairing any damages to the vessel.

**Requirements** In order to work in this occupation, the individual must be licensed by the Fisheries and Oceans Canada in Halifax.

**Training Paths** Individuals entering this occupation receive the majority of their training through on-the-job experience under the supervision of other crew members. In addition to this, training is available at the Fisheries Training Centre, Pictou, in areas such as navigation, engine repair, net repair, emergency duties, fishing master and bookkeeping. The only prerequisite for these courses is current involvement in the fishing industry. For the navigation course, a minimum of twelve months of sea time is required. The courses range in length from one week to three months. Additionally, courses are held in local communities through Canada Employment Centres which range in length from two to twelve weeks.

**Skills/Aptitudes** Individuals in this occupation should enjoy working outdoors. Fishermen follow exact instructions and often work long hours on fishing boats, sometimes exposed to extreme weather conditions. Physical strength and good manual dexterity are also required. A knowledge of boat motors and how to make minor electrical repairs would be an asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **7100**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **390**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 23000**

**For Further Information Contact**

Seafood Producers of Nova Scotia
P.O. Box 991, Dartmouth, N.S.
B2Y 3Z6

# I07 OFFICERS - FISHING VESSEL

**Principal Duties** This occupational group consists of individuals who are commanding the crew of a fishing vessel, supervising the deck activities of crew members, and organizing and directing the activities of workers engaged in harvesting fish and other marine life.

**Requirements** While officer certification is not mandatory for those entering this occupation, it may be obtained through the Nova Scotia Nautical Institute. A fishing license is required, however, by all those in this occupation and can be obtained from the Fisheries and Oceans Canada in Halifax.

**Training Paths** Individuals in this occupation have generally been involved with the fishing industry for a number of years before the position of officer is obtained. For those who desire more formal training, courses may be offered at the Nova Scotia Nautical Institute for Fishing Master, levels I, II, III and IV. Entrance to these courses is limited to those individuals currently holding certification as a navigation cadet. Additionally, a variety of fishing-related courses are available at the Fisheries Training Centre in Pictou for those wishing to upgrade their skills.

**Skills/Aptitudes** Individuals in this occupation should have a valid eye sight test certificate and possess strong leadership abilities. Exposure to various weather conditions and varying climates, often while travelling for long periods at a time, is required. The work is very seasonal in nature.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **800**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 40000**

**For Further Information Contact**

Seafood Producers Association of Nova Scotia
P.O. Box 991,
Dartmouth, N.S.
B2Y 3Z6

# I08 OCCUPATIONS IN FISHING, HUNTING, AND TRAPPING, NOT ELSEWHERE CLASSIFIED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 7319 | Occupations in Fishing, Hunting and Trapping, N.E.C. |
| 7315 | Hunters and Trappers |

**Principal Duties** This occupational group includes occupations, not elsewhere classified, related to fishing, hunting and trapping wild animals for food, pelts or sale, or to kill unwanted predators. Activities may include gathering seaweed and breeding and raising fish.

**Requirements** There are no formal requirements for entrance into these occupations, however, a university science degree may be helpful for occupations related to the breeding and raising of fish.

**Training Paths** Training for most of these occupations is provided on the job under the supervision of more experienced employees. However, to work in a fish hatchery, a Bachelor of Science degree with a major in biology or marine biology is strongly recommended. This three-year degree is available at several universities throughout Nova Scotia and requires the completion of grade twelve with an emphasis in math and the sciences for entry.

**Skills/Aptitudes** Individuals in these occupations should enjoy working outdoors and being physically active. Some jobs require irregular or long working hours and may be very seasonal in nature. A mechanical aptitude may be necessary for making equipment repairs.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **240**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 22000**

# J01 FOREMEN/WOMEN, INSPECTING - MINERAL TESTING & TREATING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8116 | Inspecting, Testing, Grading and Sampling Occs., Mineral Ore Treating |
| 8110 | Foremen/Women, Mineral Ore Treating Occupations |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers engaged in preparing crude mineral ores for direct use or for further processing. Activities may include inspecting, testing, grading and sampling work concerned with performing routine evaluation tests and other quality control activities.

**Requirements** While there are no formal education requirements for individuals in these occupations, previous related work experience is essential.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia a person must be at least sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The foreman/woman must have a thorough knowledge of the related machinery, tools, materials and procedures, as well as a sound background in the mineral testing and treating industry. It is recommended that individuals interested in this field take additional training. A two-year course in mineral technology exists at the University College of Cape Breton in Sydney. This course requires the completion of the twelfth grade or its equivalent for admission.

**Skills/Aptitudes** Manual dexterity, stamina, and an interest in chemistry and geography are important in these occupations. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**
- Estimated employment in 1987: **10**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**
- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**
- Estimated annual average earnings in 1987: **N/A**

# J02 FOREMEN/WOMEN, MINING

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers engaged in open pit and underground mining and quarrying; oil, natural gas and water well-drilling and servicing; and construction drilling and tunnelling projects.

**Requirements** While there are no formal educational requirements for individuals working in this occupation, previous related work experience is essential. A physical examination must be passed in order to work in an underground mine.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person must be at least sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The foreman/woman must have a thorough knowledge of the related machinery, tools, materials and procedures, as well as a sound background in the mining industry.

**Skills/Aptitudes** Manual dexterity, stamina, physical strength and a mechanical aptitude are important skills in this occupation. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **290**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 41000**

**For Further Information Contact**

Mining Society of Nova Scotia
125 Main St.,
Glace Bay, N. S.
B1A 4Y5

# J05 BLASTING OCCUPATIONS

**Principal Duties** This occupational group is concerned with transporting, preparing, positioning and detonating explosives to dislodge ore, coal and other minerals in mines and quarries; and in building and road excavation. Duties may involve post hole blasting, well digging, stump removal, seismic blasting, and underwater blasting.

**Requirements** An individual working in these occupations must be certified by the Board of Examiners at the Department of Labour.

**Training Paths** The only method of training for this occupation is on-the-job under the supervision of a certified blaster. After a minimum of six months, the candidate is then eligible to write the class four examination. The individual may progress from class four to class one based on the accumulation of work experience and the successful completion of the previous class. Candidates are required to do self study before writing each examination. A one-day blaster's safety seminar is offered by the Department of Labour and is generally taken before writing the class four exam. A minimum age of nineteen years is required.

**Skills/Aptitudes** Individuals in these occupations must be willing to follow precise instructions and obey safety regulations. The ability to work as a member of a team is also necessary. As most of the work is done outdoors, exposure to weather conditions, noise, vibration, and dust are characteristic of the job.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **100**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Board of Examiners for Certification of Blasters
Department of Labour
P.O. Box 697
Halifax, N.S.
B3J 2T8

# J06 ROTARY WELL-DRILLING

**Principal Duties** This occupational group is concerned with rotary drilling to search for or to extract oil and natural gas from the earth. Duties may include assembling, erecting, and operating drilling rigs; raising or lowering drill pipes and bits, casings, and measuring instruments; and servicing drilling rigs and related equipment.

**Requirements** While there are no formal training requirements for individuals in this occupation, the completion of a training program will greatly enhance employment prospects.

**Training Paths** A two-year program in petroleum resources technology is available at the Nova Scotia Institute of Technology in Halifax. The minimum entrance requirement is grade twelve with emphasis in math, physics and chemistry. Alternatively, an individual could begin their career in a junior position and gain knowledge of all drilling operations by working in various positions under supervision.

**Skills/Aptitudes** Individuals in this occupation should enjoy working outdoors in all kinds of weather. There may be some exposure to noise and dust as well. Manual dexterity and physical strength are required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **40**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# K01 SKILLED FARMING OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 7112 | Farmers |
| 7182 | Farm Workers |
| 7131 | Farm Management Occupations |
| 7180 | Foremen/Women: Other Farming, Horticultural and Animal-Husbandry Occupations |
| 7197 | Farm Machinery Operators and Custom Operators |

**Principal Duties** This occupational group is concerned with working on or operating a farm. Activities may include operating farm machinery; performing managerial or supervisory activities such as planning, organizing, directing and controlling the operation of farms, farm holdings, or a landscaping business; and supervising and coordinating the activities of the workers involved.

**Requirements** There are no formal entrance requirements for individuals wishing to enter these occupations.

**Training Paths** The majority of training is provided on the job. Individuals interested in these occupations may apply to the Nova Scotia Agricultural College in Truro for training in many different areas of farming. These programs are two to four years in length. Successful completion of the twelfth grade or its equivalent with an emphasis in science and math is generally specified as a prerequisite for acceptance into these programs.

**Skills/Aptitudes** Individuals in this occupation should have an interest in the farming industry and enjoy working outdoors.

## Nova Scotia Labour Market Conditions:

**Employment**
- Estimated employment in 1987: **5300**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **280**

**Unemployment**
- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**
- Estimated annual average earnings in 1987: **$ 21000**

**For Further Information Contact**
Nova Scotia Agricultural College
P.O. Box 550
Truro, N.S.
B2N 5E3

# K02 SKILLED FORESTRY OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 7510 | Foremen/Women, Forestry and Logging Occupations |
| 7511 | Forestry Conservation Occupations |
| 7516 | Log Inspecting, Grading, Scaling and Related Occupations |

**Principal Duties** This occupational group is concerned with maintaining, protecting and conserving forests; cutting and evaluating timber; moving logs from logging site to storage or transportation areas; planting trees; assembling log booms; and performing other forestry and logging functions.

**Requirements** Although there are generally no formal requirements for entrance into these occupations, many employers require some education or experience in the field.

**Training Paths** Individuals interested in these occupations may receive training through forestry programs offered at the Annapolis, Cumberland and Lunenburg Regional Vocational Schools and at the Adult Vocational Training Centre in Cape Breton. These programs are one year in length and include extensive field work. Successful completion of the tenth grade or its equivalent and a forestry related background is generally specified as a prerequisite for acceptance into these programs. Individuals may further their education at the Forest Rangers School in New Brunswick if they wish.

**Skills/Aptitudes** Individuals should have an aptitude for map-reading, be physically fit, and enjoy being outdoors and working in the woods.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **560**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 33000**

**For Further Information Contact**

Nova Scotia Forestry Association
64 Inglis Place, Suite 202
Truro, N.S.
B2N 4B4

or

N.S. Forest Products Association
P.O. Box 696
Truro, Nova Scotia
B2N 5E5

# L01 SUPERVISOR, FOOD AND BEVERAGE PREPARATION

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers involved in preparing and serving food and beverages.

**Requirements** Food service supervisors working in institutions in Nova Scotia are generally required to be registered with the Nova Scotia Food Service Supervisors Association. In Nova Scotia a person must be nineteen years of age to work in a licensed establishment.

**Training Paths** A Food Service Technology program is offered at the Nova Scotia Institute of Technology in Halifax. This two-year program requires the completion of the twelfth grade for admission.

**Skills/Aptitudes** Individuals in these occupations are in constant contact with the public. They must be friendly and pleasant with their co-workers and customers. They should be able to work alone and as part of a team, and to withstand the pressure and strain of working in close quarters during busy periods. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1730**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **220**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 21000**

**For Further Information Contact**

Nova Scotia Food Service
Supervisors Association
P.O. Box 207
Armdale, N.S.
B3L 4J9

or

Nova Scotia Restaurant and Food Services Association
P.O. Box 3128, South
Halifax, N.S.
B3J 3G6

# L02 SUPERVISOR, ACCOMMODATION

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers engaged in providing accommodation services in hotels, motels, trailer parks, apartment houses, office buildings and similar facilities.

Activities may include executing work schedules; retaining supply stock; hiring and assigning duties to staff; recommending or initiating personnel changes; training workers; and evaluating employee performance.

**Requirements** There are no formal entrance requirements for individuals in this occupation, however, the opportunity for advancement to this position is increased according to the amount of education and experience one possesses.

**Training Paths** In this occupation, education in management and hospitality services is a definite asset. A four-year program entitled Tourism and Hospitality Management is offered at Mount Saint Vincent University in Halifax and a two-year program entitled Hospitality Administration is available at the University College of Cape Breton in Sydney. Completion of grade twelve or its equivalent is normally required for entry into these programs. A two-year program entitled Hotel-Motel-Restaurant Management is offered at the Dartmouth Regional Vocational School. Entry to this program requires grade eleven or its equivalent.

**Skills/Aptitudes** Individuals in this occupation should possess good fundamental mathematics, management, and administrative skills. An aptitude for neatness and cleanliness, a friendly disposition, and the desire to perform duties of a routine nature are also important. The individual should also be able to create a positive working atmosphere for his/her staff.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **580**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 14000**

# L05 FOREMEN/WOMEN, INSPECTING - METAL PROCESSING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8130 | Foreman/Women, Metal Processing and Related Occupations |
| 8146 | Inspecting, Testing, Grading and Sampling Occupations, Metal Processing |

**Principal Duties** This occupational group is concerned with supervising and co-ordinating the activities of workers engaged in metal processing to make semi- or finished-metal products. Responsibilities may include inspecting, testing, grading, and sampling work concerned with quality control. Individuals are also responsible for the efficient manning of production processes to improve productivity while maintaining defined product quality.

**Requirements** While there are no formal education requirements for individuals in these occupations, previous related work experience is essential.

**Training Paths** Training in this field is generally on the job. In Nova Scotia, an individual must be at least sixteen years old and have completed the tenth grade or its equivalent. Individuals in these occupations must be proficient in the use of all related machinery and ensure that the assigned tasks are carried out as required. This usually requires at least three to five years of experience in a related, junior position.

**Skills/Aptitudes** Individuals entering these occupations should be mechanically inclined, have a sound knowledge of machines, and be familiar with metal processing techniques and the properties of metal. Effective communication and supervisory skills are essential. Physical fitness is also important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **110**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Director, Human Resources
Trenton Works Division
Hawker Siddeley Canada Inc.
P.O. Box 130
Trenton, N.S.
B0K 1X0

# L07 FOREMEN/WOMEN, INSPECTING - CHEMICALS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8160 | Foremen/Women: Chem., Petro., Rubber, Plastics, Related Mats. Processing Occs. |
| 8176 | Inspecting, Testing, Sampling Occs.: Chem., Petro., Rubber, Plas., Rel. Mat. Proc. |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers engaged in refining, processing and preparing petroleum, chemicals, coal, rubber, plastic and related materials for subsequent use. Responsibilities may include inspecting, testing, grading, and sampling work concerned with quality control activities.

**Requirements** While there are no formal requirements, individuals in these occupations typically have completed the twelfth grade or its equivalent and a Bachelor's degree in science or chemistry, although people with less education are sometimes accepted. Previous related experience is also important.

**Training Paths** Three- and four-year degree programs are available at various universities throughout the Province. The University College of Cape Breton in Sydney offers a two-year program in Chemical Technology from which individuals may transfer to university programs. Individuals may also enroll in a one-year Process Operations Course at the Nova Scotia Institute of Technology in Halifax. Training in these occupations are generally provided on-the-job. The foreman/woman must have a thorough knowledge of the properties of petroleum, coal, rubber and plastic and be proficient in the use of all related machinery and tools.

**Skills/Aptitudes** Individuals must have a keen eye for detail and be capable of conducting exacting procedures repeatedly. Manual dexterity, stamina and ability to work with machinery are important skills required in these occupations. He/she must be capable of supervising the staff and maintaining production schedules. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **110**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# L08 FOREMEN/WOMEN, INSPECTING - FOOD AND BEVERAGE PROCESSING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8210 | Foremen/Women: Food, Beverage and Related Processing Occupations |
| 8226 | Inspecting, Testing, Grading, Sampling Occs.: Food, Beverage, Rel. Proc. |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers engaged in preparing food and related products for domestic or commercial use. Responsibilities may include inspecting, testing, grading, and sampling work concerned with quality control activities.

**Requirements** While there are no formal educational requirements for individuals in these occupations, previous related work experience is essential.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person must be sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The Foreman/woman must have a thorough knowledge of the related machinery, tools, materials, and procedures, as well as a sound background in the processing industry. Additionally, a quality control food testing course is available at Kings Regional Vocational School in Kentville. This one-year course requires grade eleven for admission with preference to students with grade twelve.

**Skills/Aptitudes** People in these occupations must be able to work alone and as part of a team. A keen sense of taste and smell, the stamina to stand for hours at a time, and personal cleanliness are important qualifications. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **830**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 24000**

# L09 FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS AND PROCESSING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8230 | Foremen/Women: Wood Processing occupations, Except Paper Pulp |
| 8540 | Foremen/Women: Fabricating, Assembling and Repairing Occs., Wood Products |
| 8236 | Inspecting, Testing and Grading Occs.: Wood Processing Except Paper Pulp |
| 8350 | Foremen/Women, Wood Processing Occupations |
| 8356 | Inspecting Occupations, Wood Machining |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers involved in sawing and preparing lumber and related materials for use; shaping wood into parts or products by machining; and treating wood with preservatives and fire-retardants. Responsibilities may include inspecting, testing, grading and sampling work concerned with quality control activities in wood processing, except in pulp and paper making.

**Requirements** While there are no formal education requirements for individuals in these occupations, previous related experience is essential.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person must be sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The Foreman/woman must have a thorough knowledge of the related machinery and tools, as well as a sound background in the properties of materials being processed and the procedures to be utilized. He/she must be capable of supervising the staff and maintaining production schedules. Individuals wishing to advance in this field should consider additional course training at the Nova Scotia Agricultural College in Truro.

**Skills/Aptitudes** Manual dexterity, stamina, and a mechanical aptitude are important skills required in these occupations. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **360**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# L10 FOREMEN/WOMEN, INSPECTING - PULP AND PAPER

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8256 | Inspecting, Testing, Grading and Sampling Occs., Pulp and Papermaking |
| 8250 | Foremen/Women, Pulp and Papermaking and Related Occupations |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers involved in converting cellulose materials into pulp, and making newsprint, and finishing paper and paperboard. Responsibilities may include direct supervision of manpower, inspecting, testing, grading, and sampling work concerned with quality control activities.

**Requirements** While there are no formal education requirements for individuals in these occupations, most companies have minimum entry education standards, which exceed provincial regulations. Experience is the major requirement.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person must be sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The Foreman/woman must have a thorough knowledge of the related machinery, tools, materials, and procedures, as well as a sound background in the pulp and paper industry. He/she must be capable of supervising the staff and maintaining production schedules. Individuals wishing to advance in this field should consider additional course training at the Nova Scotia Agricultural College in Truro.

**Skills/Aptitudes** Manual dexterity, stamina and a mechanical aptitude are important skills required in these occupations. Supervisory and effective oral and written communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **210**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Industrial Relations Manager
Bowater Mersey Paper Co. Ltd.
P.O. Box 1150
Liverpool, N.S.
B0T 1K0

or

Public Affairs Manager
Scott Maritimes Ltd.
Abercrombie Point,
Pictou County, N.S.

# L11 FOREMEN/WOMEN, INSPECTING - TEXTILE PROCESSING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8276 | Inspecting, Testing, Grading and Sampling Occs., Textile Processing |
| 8260 | Foreman/Women, Textile Processing Occupations |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers involved in processing textile fibers into yarn or thread and weaving, knitting and finishing fabrics. Responsibilities may include inspecting, testing, grading, and sampling work concerned with quality control activities.

**Requirements** While there are no formal education requirements for individuals in these occupations, previous experience is essential.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person generally must be sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. Individuals in these occupations must learn specific duties and processes depending upon the materials being processed. The foreman/woman must have a thorough knowledge of various textiles and fabrics. He/she must be capable of operating all the related machinery and maintaining production schedules.

**Skills/Aptitudes** Individuals in these occupations must have stamina and be capable of standing for long periods of time. They must be methodical and have good hand/eye co-ordination. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **120**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Stanfields Ltd.
Logan St.
Truro, N.S.
B2N 5C2

or

N.S. Textiles Ltd.
Nesbitt St.
Windsor, N.S.
B0N 2T0

# L17 FOREMEN/WOMEN, INSPECTING - RUBBER AND PLASTIC PRODUCTS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8576 | Inspect, Test, Grade, Sampling Occs.: Fab., Ass., Repair, Rubber, Plastic |
| 8570 | Foremen/Women: Fab., Ass., Repairing Occs., Rubber, Plastic, Related Products |

**Principal Duties** This occupational group is concerned with supervising and coordinating the activities of workers engaged in fabricating, assembling and repairing rubber, plastic and related products. Responsibilities may include inspecting, testing, grading, and sampling work concerned with quality control activities.

**Requirements** While there are no formal education requirements for individuals in these occupations, previous experience is essential.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person must be at least sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The foreman/woman must have a thorough knowledge of the related machinery, tools, materials and procedures, as well as a sound background in the rubber and/or plastics industry.

**Skills/Aptitudes** Manual dexterity, stamina, a mechanical aptitude and experience with machinery and tools are important skills required in these occupations. The ability to carry out exacting procedures repeatedly is also important. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **540**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **60**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 31000**

# L20 FOREMEN/WOMEN, INSPECTING - CONSTRUCTION

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8780 | Foremen/Women, Other Construction Trades Occupations |
| 8796 | Inspecting and Testing Occupations, Construction, Except Electrical |

**Principal Duties** This occupational group is concerned with supervising and co-ordinating the activities of workers involved in erecting, repairing and maintaining buildings and other works. Responsibilities may include inspecting, testing, grading and sampling work concerned with quality control activities.

**Requirements** While there are no formal education requirements for individuals in these occupations, previous related experience is essential.

**Training Paths** Training in this field is generally provided on the job. In Nova Scotia, a person must be at least sixteen years old and have completed the tenth grade or its equivalent, although people with less education are sometimes accepted. The foreman/woman must have a thorough knowledge of the related machinery, tools, materials and procedures, as well as a sound background in the construction industry. It is recommended that individuals interested in this field take a two-year course such as construction administration technology offered at the Nova Scotia Institute of Technology in Halifax or construction technology offered at the University College of Cape Breton in Sydney. Both of these programs require completion of the twelfth grade or its equivalent for entry.

**Skills/Aptitudes** Individuals in these occupations should be in good physical condition. Manual dexterity, stamina, and a mechanical aptitude are important skills in these occupations. Supervisory and effective communication skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **2290**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **190**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 31000**

**For Further Information Contact**

Construction Association of N.S.
P.O. Box 1476, North
Halifax, N.S.
B3H 5H7

# L25 INSPECTORS, GOVERNMENT AND NON-GOVERNMENT

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 1116 | Inspectors and Regulatory Officers, Government |
| 1176 | Inspectors and Regulatory Officers, Non-Government |

**Principal Duties** This occupational group is concerned with inspecting, testing, grading, and sampling in both government and non-government sectors. Responsibilities include enforcing adherence to laws and regulations and observance of company policies and procedures, providing advice on health matters, quality of service, safety and other regulations and standards in organizations or agencies.

**Requirements** There are no formal requirements for entrance to the occupations in this group, however, previous experience in the field may be necessary.

**Training Paths** Training for these occupations is generally in the form of on-the-job training. The length and type of training depends on both the employer and the industry in which the individual is working.

**Skills/Aptitudes** Individuals in these occupations should possess an interest in the field in which they are working. Good observational, analytical, and communication skills are important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1260**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **130**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 33000**

**For Further Information Contact**

Nova Scotia Safety Council
2745 Dutch Village Road,
Suite 106
Halifax, N.S.
B3L 4G7

# L26 FOREMEN/WOMEN/INSPECTING, METAL PRODUCTS AND MACHINING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8526 | Inspecting and Testing Occupations, Fabricating and Asssembling Metal Products, N.E.C. |
| 8520 | Foremen, Fabricating and Assembling Occupations, Metal Products, N.E.C. |
| 8396 | Inspecting and Testing Occupations, Machining, N.E.C. |

**Principal Duties** This occupational group is concerned with supervising and co-ordinating the activities of workers engaged in metal processing to make semi- or finished products. Responsibilities may include inspecting, testing, grading, and sampling work concerned with quality control.

**Requirements** The occupation of machinist is a designated trade in Nova Scotia. Individuals working at the foreman/woman/inspecting level would generally be required to possess journeyman status.

**Training Paths** For more information on how to train in the machinist trade, consult page 43, Machinist Occupations. At least three to five years of additional work experience is usually required to work at the level of a foreman/woman/ inspector.

**Skills/Aptitudes** Individuals entering these occupations should be mechanically inclined, have a sound knowledge of machines, and be familiar with machining techniques and the properties of metal. Effective communication and supervisory skills are essential. Physical fitness is also important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **180**
- Employment growth between 1987 and 1995 is projected to be: above **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M00 TOOL AND DIE MAKING

**Principal Duties** This occupational group is involved in constructing, repairing, and testing custom-made, prototype, or special tools, dies, jigs, fixtures and gauges within specific dimensions. Duties may include laying out, performing mathematical computations, assembling and positioning work pieces and machines, operating machine-tools, reading mechanical drawings, heat treating parts, hand-fitting, and finishing work to specifications.

**Requirements** While this occupation is not an apprenticeable trade in Nova Scotia, entrance normally requires the completion of the machinist apprenticeship program.

**Training Paths** Detailed information on machinist apprenticeship training can be obtained on page 42, Machinist Occupations. After this program has been completed, the individual can then seek employment with a company that uses tool and die makers. Further training in this specialty area will then be provided on the job under the supervision and instruction of more experienced employees.

**Skills/Aptitudes** Individuals in this occupation should have an interest in working with machines and precise techniques and processes. There may be exposure to heat, noise, vibration, dust, and odours within the working environment. Manual dexterity is necessary as is the ability to perform basic mathematical functions.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **40**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M01 MACHINIST OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8313 | Machinist and Machine-Tool Setting-up Occupations |
| 8310 | Foremen/Women, Metal Machining Occupations |
| 8316 | Inspecting and Testing Occupations, Metal Machining |

**Principle Duties** This occupational group is concerned with shaping metal into parts or products of specified dimensions. Activities include measuring, turning, boring, milling, sawing, precision grinding and planing. May be involved in supervising and co-ordinating the activities of other workers.

**Requirements** This occupation is a designated apprenticeable trade in this Province. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are several entry paths into these occupations. Individuals may receive basic training through a two-year program offered at the Provinces regional vocational schools. Individuals may also seek employment directly with an employer and proceed through the block release program. As a third alternative, individuals may make application through their Canada Employment Centre office for a pre-employment course held at the Nova Scotia Institute of Technology in Halifax and at the University College of Cape Breton, in Sydney. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent. The term of apprenticeship for this trade is four years.

**Skills/Aptitudes** Individuals in these occupations should have high school courses in math and science and be able to understand engineering drawings and specifications.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **840**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **50**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M02 SHEET METAL OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8333 | Sheet-Metal Workers |
| 8330 | Foremen/Women, Metal Shaping and Forming Occupations, Except Machining |
| 8336 | Inspecting, Testing Occs., Metal Shaping and Forming, Except Machining |

**Principal Duties** This occupation is concerned with shaping, forming and repairing sheet metal parts or products to specified dimensions. Activities include drafting patterns, measuring, forging, cutting, riveting, shearing, welding and soldering. May be involved in supervising and coordinating the activities of other workers.

**Requirements** The occupation of Sheet Metal Worker is a designated apprenticeable trade. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of a Certificate of Qualification.

**Training Paths** There are two entry paths into this occupation. Individuals may receive basic training through a two-year program offered at the Province's regional vocational schools or they may seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals in this trade should have an interest in and an aptitude for mathematics, geometric design, drafting, and blueprint reading, as well as the ability to work comfortably at heights.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **570**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **50**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M03 WELDER

**Principal Duties** This occupational group is concerned with joining, surfacing, cutting, or otherwise fabricating and repairing ferrous and non-ferrous metal parts and structures using welding and cutting equipment.

**Requirements** This occupation is a designated trade in Nova Scotia. It is not compulsory certified, although specific types of welding work require on-the-job testing and certification. Completion of a welding course is highly recommended.

**Training Paths** There are several entry paths into this occupation. Individuals may receive basic training through a two-year program offered at the Province's regional vocational schools. Individuals may also seek employment directly with an employer and receive on-the-job training. As a third alternative, a one-year program is offered at the Adult Vocational Training Centres in Cape Breton and Dartmouth. Typically, individuals in this trade will have completed the ninth grade or its equivalent.

**Skills/Aptitudes** Individuals in this trade should enjoy working with their hands, possess good eye and hand co-ordination and physical strength, and be able to concentrate over extended periods of time. The ability to perform mathematical computations is helpful.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **2030**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **110**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M04 OTHER MECHANICS AND REPAIRERS, NOT ELSEWHERE CLASSIFIED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8580 | Foremen/Women: Other Mechanics and Repairers, Except Electrical |
| 8589 | Other Mechanics and Repairers, Except Electrical, N.E.C. |
| 8586 | Inspecting and Testing Occupations, Equipment Repair, N.E.C. |

**Principal Duties** This occupational group includes occupations, not elsewhere classified, concerned with repairing, adjusting, servicing and installing machines or equipment primarily of a mechanical nature. Knowledge of a specific machine is normally required. Activities may include supervising and coordinating activities of workers; and inspecting and testing work involved with quality control activities.

**Requirements** The specific entrance requirements for these occupations vary widely depending on the area of specialization. However, some type of mechanical repair course would be of definite benefit.

**Training Paths** Small gas engine repair programs are offered at three of the Province's regional vocational schools. These programs generally require completion of the tenth grade for admission. Courses in motor vehicle repair and heavy duty equipment repair are offered at most of the Province's regional vocational schools and the University College of Cape Breton in Sydney. The length of the classroom training is two years and is combined with an additional two years of on-the-job training. While certification in this trade is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Skills/Aptitudes** It is essential that individuals in these occupations enjoy working with engines and motors. It is important to be both electrically and mechanically inclined. The ability to work well with others and to follow instructions closely are also necessary. Some shift work may be required as well as exposure to noise and vibration.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **2110**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **130**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Apprenticeship Division
Department of Advanced Education and Job Training
P.O. Box 2036, Station M
Halifax, N.S.
B3J 3B7

# M05 MOTOR-VEHICLE MECHANICS

**Principal Duties** There are a number of occupations within this group, three of which are the designated apprenticeable trades of Motor Vehicle Mechanic, Bus and Transport Mechanic, and Motor Vehicle Body Repair. The occupations of Motor Vehicle Mechanic and Bus and Transport Mechanic are concerned with repairing and servicing gasoline- or diesel-powered motor vehicles. Activities may include testing, diagnosing, disassembling, and replacing parts and assemblies using common or special hand and power tools, machines and equipment. The occupation of Motor Vehicle Body Repair is involved in repairing damaged body parts and assemblies, and the interior finishings of automotive vehicles.

**Requirements** Motor Vehicle Mechanic and Bus and Transport Mechanic are compulsory certified apprenticeship trades and individuals obtaining employment in these occupations must register with the Apprenticeship Section of the Department of Advanced Education and Job Training. The occupation of Motor Vehicle Body Repair is not compulsory certified, however, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are several entry paths into these occupations. Individuals may receive basic training through a two-year program offered at either the Province's Regional Vocational Schools, the Nova Scotia Institute of Technology in Halifax or the University College of Cape Breton in Sydney. Individuals may also seek employment directly with an employer and proceed through the block release program. As a third alternative, individuals seeking training in the Motor Vehicle Mechanic trade may make application through their local Canada Employment Centre office for a pre-employment course held at the University College of Cape Breton in Sydney. Individuals obtaining employment in this trade should register with the Apprenticeship Section in order that they may receive credit for their training and experience. Typically, individuals in these trades will have completed the tenth grade or its equivalent. The term of apprenticeship is generally four years.

**Skills/Aptitudes** Individuals in these trades should have practical skills, a mechanical aptitude and patience. A good understanding of the specifications and underlying principles of automotive vehicle construction and operation is necessary. It is also important to keep up with the constant changes in repair techniques and applications.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **5340**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **330**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 25000**

**For Further Information Contact**

Program Development, Apprenticeship Section
Department of Advanced Education and Job Training

# M06 AIRCRAFT MECHANICS AND REPAIRERS

**Principal Duties** This occupational group is concerned with repairing aircraft airframes, engines, and accessories. Activities may include servicing and overhauling aircraft and aircraft engines to ensure airworthiness; repairing, assembling and testing aircraft accessories such as power-brake systems, fuel-injection systems, and hydraulic and vacuum pumps; installing and servicing fabric-aircraft-surface coverings; and repairing pneumatic de-icers used in aircraft.

**Requirements** Entrance into these occupations requires the successful completion of a Department of Transport federally- approved Aircraft Maintenance Engineer Training program.

**Training Paths** While there is no training available for these occupations in Nova Scotia, approved programs exist in Moncton, New Brunswick, Gander, Newfoundland, and Scarborough, Ontario. These courses are generally one year in length and require the completion of the twelfth grade or its equivalent with an emphasis in mathematics and physics. Upon completion of these programs the individual requires three years of combined training and on-the-job experience in order to qualify for the Aircraft Maintenance Engineers (AME) License.

**Skills/Aptitudes** Individuals in these occupations should have good manual dexterity as well as a mechanical and technical aptitude. The ability to follow instructions and perform to a high degree of accuracy is very important. Bilingualism is usually required, as is good eyesight and hearing. Some shift work may be required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **400**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 29000**

**For Further Information Contact**

Aircraft Maintenance Engineers (Atlantic) Inc.
Site 16, RR #1
P.O. Box 9
Fredericton, NB
E3B 4X2

# M07 RAIL MECHANICS

**Principal Duties** This occupational group is concerned with repairing and servicing motive-power units, railway rolling stock, and related equipment. Activities may include servicing and rebuilding mechanical and structural components of railway passenger and freight cars; servicing and replacing electrical, mechanical or pneumatic equipment on street-cars and subway-cars; and repairing compressed-air valves, such as those used in railway rolling stock.

**Requirements** This occupation generally requires the completion of an apprenticeship program in heavy duty equipment repair. While certification in this trade is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** Individuals interested in this occupation can receive their training in one of two ways. The first option is to receive basic training through a two-year heavy duty equipment repair program offered at several of the Provinces regional vocational schools or at the University College of Cape Breton in Sydney. Completion of at least the tenth grade or its equivalent is generally required for entry. The second option is to seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in these trades should register with the Apprenticeship Division of the Department of Advanced Education and Job Training in order to receive credit for their training and experience. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals in this occupation should enjoy working with heavy, industrial machinery, in particular, railway rolling stock. It is important to be both electrically and mechanically inclined. The ability to work well with others and to follow instructions closely are also necessary. Some shift work may be required as well as some exposure to noise and vibration.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **120**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Via Rail
777 Main St.
Moncton, N.B.
E1C 1E9

# M08 INDUSTRIAL, FARM & CONSTRUCTION MACHINERY MECHANIC

**Principal Duties** This occupational group is concerned with repairing, adjusting and servicing a wide variety of industrial machinery used in production processes. Activities may include disassembling, aligning and fitting parts; occasionally machining semi-finished or repaired parts; and installing and adjusting to specification.

**Requirements** There are a number of occupations within this group, two of which are the designated apprenticeable trades of Industrial Mechanic and Heavy Duty Equipment Repair Mechanic. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification. For the other occupations in this group, it is recommended that these or similar mechanic courses be completed before entering the job market.

**Training Paths** There are two entry paths into these trades. Individuals may receive basic training through two-year programs offered at the Provinces regional vocational schools or at the University College of Cape Breton in such areas as Heavy Duty Equipment Repair, Industrial Mechanics or Farm Equipment Repair. Alternatively, one may seek employment directly with an employer and proceed through the block release program for the apprenticeable trade courses. Individuals obtaining employment in these trades should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in these trades will have completed the tenth grade or its equivalent. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals in these occupations are required to have a good understanding of high school science and mathematics and have a good mechanical aptitude.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **2790**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **150**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: below **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 29000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, Nova Scotia
B3J 3B7

# M09 MARINE CRAFT FABRICATION

**Principal Duties** This occupational group is concerned with constructing and servicing ships; and making, assembling and repairing other metal, wood or fiberglass marine craft. Activities may include laying out and shaping parts; aligning, fitting and fastening fabricated parts and components; installing and repairing engines, auxiliary machinery, accessories, rigging and equipment; and making adjustments.

**Requirements** There are a number of occupations within this grouping, one of which is Marine Fitter. This occupation is a designated apprenticeable trade. Certification is not compulsory, however, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are several entry paths into the marine fitter trade occupation. Individuals may receive basic training through a two-year program offered at the Provinces Regional Vocational Schools. Individuals may also seek employment directly with an employer and proceed through the block release program. As a third alternative, individuals may make application through their Canada Employment Centre office for a pre-employment course held at the Nova Scotia Institute of Technology in Halifax. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent. The term of apprenticeship for this trade is four years.

**Skills/Aptitudes** Individuals in this occupation should be mechanically inclined and enjoy working with boats. A good understanding of the specifications and underlying principles of ship construction and operation would be an asset. Some exposure to noise and vibration may be required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1290**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **150**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 25000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M10 ELECTRICAL POWER WORKERS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8730 | Foremen/Women: Electrical Power, lighting and Wire Communications Equipment |
| 8731 | Electrical Power Line Workers and Related Occupations |
| 8736 | Inspecting, testing Occs: Elect. Power, Lighting and Wire Communications Equip. Installation and Repair |
| 8739 | Electrical Power, N.E.C. |

**Principal Duties** This occupational group is concerned with supervising and co-ordinating the activities of workers involved in erecting, installing and repairing electrical power, lighting and wire communications equipment. Activities may include erecting and servicing street lights, repairing and maintaining electrical equipment in generating station or powerhouse or inspecting, repairing and adjusting electric meters used for recording electric current consumption.

**Requirements** One occupation in this group is that of Lineman which is a designated apprenticeable trade. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** To enter into this occupation individuals must seek employment directly with an employer and proceed through the block release program where the employer will release the apprentice to take a block of training. Theory training is conducted through an in-class lecture method. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals entering this occupation should possess a good foundation in mathematics and science. Linemen are usually required to work outdoors at varying heights and in all kinds of weather.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1320**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 34000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M11 CONSTRUCTION ELECTRICIAN AND REFRIGERATION AND AIR CONDITIONING MECHANIC

**Principal Duties** This occupational group is concerned with installing and repairing wiring in homes, buildings and adjoining areas to provide electric energy. Activities may include installing lighting and other fixed electrical equipment; and making repairs to electrical installations.

**Requirements** There are a number of occupations within this group, two of which are Construction Electrician and Refrigeration and Air Conditioning Mechanic. Both of these occupations are designated apprenticeable trades with compulsory certification.

**Training Paths** There are two entry paths into these occupations. Individuals may receive basic training through a one- or two-year program offered at the Provinces Regional Vocational Schools or they may seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in these trades must register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in these trades will have completed the eleventh grade or its equivalent. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals in these trades should have a good foundation in mathematics and science. A good mechanical and electrical aptitude is also important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1700**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M13 CARPENTER

**Principal Duties** This occupational group is concerned with constructing, renovating and maintaining wooden structures and installing fixtures using power saws, planes, braces, hammers and other carpentry tools.

**Requirements** The occupation of Carpenter is a designated apprenticeable trade. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are several entry paths into this occupation. Individuals may receive basic training through a two-year program offered at several of the Provinces Regional Vocational Schools. Individuals may also seek employment directly with an employer and proceed through the block release program. As a third alternative, individuals may make application through their Canada Employment Center office for a pre-employment course held at the Nova Scotia Institute of Technology in Halifax and at the Adult Vocational Training Centre in Sydney. Training for this occupation takes place on a modular basis with modules being completed at the individuals' own pace. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent and they should have a good understanding of mathematics. The term of apprenticeship for this trade is generally four years.

**Skills/Aptitudes** Individuals in this trade should be in good physical condition. They are required, at times, to work under adverse conditions, such as cold and wet weather and to work at varying heights from ladders, staging and on roof tops. Good hand skills and material handling ability is necessary. Some artistic ability is an asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **5200**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **220**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 22000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M14 BRICKLAYERS AND STONE MASONS

**Principal Duties** This occupational group is concerned with preparing and laying brick, stone, concrete block, tile, marble, refractory and related materials using chisels, hammers, trowels, levels and other hand tools.

**Requirements** While bricklaying and stone masonry are both designated apprenticeable trades, only bricklaying requires compulsory certification.

**Training Paths** There are two entry paths into the occupation of bricklayer. Individuals may receive basic training through a two-year training program offered at several of the Provinces Regional Vocational Schools or they may seek employment directly with an employer and proceed through the block release program. Training for this trade takes place on a modular basis with modules being completed at the individuals' own pace. The only method of training for restoration stone masonry is on-the-job training with one day of classes per week held at the Nova Scotia Institute of Technology in Halifax. Individuals obtaining employment in these trades must register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent. The term of apprenticeship for these trades is generally four years.

**Skills/Aptitudes** Individuals in these trades should be in good physical condition and be able to work comfortably at heights. A good imagination and artistic ability are necessary.

Manual dexterity is also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **500**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M15 PLASTERER

**Principal Duties** This occupational group is concerned with applying plaster, stucco, and related materials to structural surfaces; securing laths to walls and ceilings; applying coats of plaster, moldings and special effects; spraying fireproofing materials on surfaces; and building and finishing acoustical ceilings and dry walls. May inspect plans or specifications to define shape and dimensions of plaster work as well as work site.

**Requirements** There are no formal entrance requirement for this occupation.

**Training Paths** The only method of training for this occupation in Nova Scotia is through on-the-job training under the supervision of a more experienced employee.

**Skills/Aptitudes** For individuals in this occupation physical strength, manual dexterity and good eye-hand coordination are essential. The ability to work well with others is necessary as plasterers often work in teams. An imagination for creating new designs and shapes for the final coat of plaster is recommended.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **360**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 25000**

**For Further Information Contact**

International Union of Bricklayers and
Allied Craftsmen
Local 1
6074 Lady Hammond Road, Suite 309
Halifax, N.S.
B3K 2R7

# M16 PAINTERS

**Principal Duties** This occupation is concerned with applying paint and related materials to the interior and exterior of buildings and other structures; applying wallpaper and fabrics to walls and ceilings; and posting advertising bills. Other activities include determining the quantity of materials needed, removing old paint and paper, and smoothing surfaces.

**Requirements** There are no formal training requirements for individuals in this occupation.

**Training Paths** Training is usually provided on-the-job in this occupation, however, individuals may apply for a one-year program entitled Painting and Wood Finishing offered at the Halifax Regional Vocational School. Typically, individuals in this trade have successfully completed the ninth grade or its equivalent.

**Skills/Aptitudes** Individuals in this trade should have patience and an eye for detail. An artistic ability is a definite asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1360**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **120**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 23000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M17 PIPEFITTING/ PLUMBING

**Principle Duties** This occupational group includes occupations concerned with installing and repairing pipelines, plumbing, fire protection equipment and related equipment for distributing water, gas, steam, sewage or other materials.

**Requirements** There are a number of occupations within this group, three of which are the designated apprenticeable trades of Plumber, Sprinkler Fitter, and Steamfitter/Pipefitter. The occupations of Plumber and Sprinkler Fitter are compulsory certified. While the occupation of Steamfitter/Pipefitter is not compulsory certified, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** To enter into the occupations of Plumber and Steamfitter/Pipefitter individuals may receive basic training through a one or two-year program at one of the Provinces regional vocational schools. Another alternative for individuals wishing to enter either the Plumbing, Steamfitting/Pipefitting, or Sprinkler Fitting trades is to seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in these trades should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in these trades will have completed the tenth grade or its equivalent. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals in these trades should have the ability to climb, stoop, and work in cramped and awkward conditions. Other important characteristics include manual dexterity, coordination, a methodical approach to work, and the ability to plan ahead.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1410**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **60**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M18 STRUCTURAL METAL ERECTOR

**Principal Duties** This occupational group is involved with raising, positioning, joining and servicing pre-fabricated structural-metal parts and subassemblies by bolting, screwing, riveting or welding. May involve building, assembling, and installing ornamental, recreational and functional metal and ironwork structures, erecting metal tanks to store liquids and loose materials, or building scaffolding to make frameworks in and around structures such as buildings and industrial sites from which workers may perform duties.

**Requirements** There are no formal entrance requirements for entry into this occupation other than a minimum age of 16 years.

**Training Paths** To gain experience in this occupation individuals must seek employment in this area and receive on-the-job training under the supervision of a more experienced employee.

**Skills/Aptitudes** Individuals in this occupation should enjoy working outdoors, sometimes at heights, and be able to work while exposed to noise and vibration. Physical strength and manual dexterity are also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **200**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086 Station M
Halifax, N.S.
B3J 3B7

# M19 GLAZIERS

**Principal Duties** This occupational group is involved with preparing and installing glass in buildings and furniture by utilizing bolts, screws, putty, grinding and buffing wheels, glass cutting tools, drills, hand tools and other devices. Activities may include sketching; tracing; selecting size, colour, and type of glass; bending and affixing metal framework around stained glass sections; placing glass in frames, moldings or sashes; installing mirrors or structural glass; and securing prefabricated glass units together.

**Requirements** There are no formal entrance requirements to work in this occupation.

**Training Paths** The only method of training for this occupation in Nova Scotia is through on-the-job training under the supervision of a more experienced employee. Employers will generally require that new employees be at least sixteen years of age with a grade ten education. Complete training may last up to three or four years.

**Skills/Aptitudes** People working in this occupation may be required to work outdoors on some projects but most work would be done inside. Some physical activity is required for climbing, handling heavy materials, reaching, and crouching. Precise measurements and specific tools must be used when working with glass.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **160**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

a glazier in your area

# M20 UTILITIES OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 9539 | Stationary Engine and Utilities Equip. Operating Occs., N.E.C. |
| 9530 | Foremen/Women, Stationary Engine and Utilities Equip., Operating |

**Principal Duties** This occupational group is concerned with operating and servicing stationary engines and related equipment to provide heat, ventilation, refrigeration, light or power to buildings, industrial plants or other worksites; maintaining utilities services to supply and purify water or to dispose of sewage and waste; and operating pumping and pipeline equipment to carry, store or distribute materials such as oil and natural gas.

**Requirements** There are a number of occupations within this group, one of which is the designated apprenticeable trade of Stationary Engineer. Certification is not compulsory, however, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are several entry paths into the Stationary Engineer occupation. Individuals may receive basic training through a two-year program offered at the Provinces Regional Vocational Schools. Individuals may also make application through their Canada Employment Centre office for a pre-employment course held in Port Hawkesbury and at the Cape Breton Adult Vocational Training Centre in Sydney. As a third alternative, individuals may seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in this trade should register with the Department of Labour in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the eleventh grade or its equivalent and should have a good understanding of physics and mathematics. The term of apprenticeship for this trade is four years.

**Skills/Aptitudes** Individuals in this occupation should possess a good mechanical aptitude and a mathematical ability.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1570**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **90**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 29000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M21 AIRCRAFT FABRICATING AND ASSEMBLING OCCUPATIONS, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group is concerned with assembling aircraft and aircraft subassemblies such as power plants, undercarriages, and tails and wings, normally using manufactured components. Activities may include fitting, bolting, riveting, and adjusting fabricated or assembled equipment using common, special hand or power tools, jigs and fixtures.

**Requirements** While there are no formal requirements, individuals may gain entrance into this occupation through the sheet metal apprenticeship program.

**Training Paths** There are two ways to obtain this training in Nova Scotia. Individuals may receive basic training through a two-year sheet metal program offered at most of the Province's regional vocational schools. Alternatively, individuals may seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent. The term of apprenticeship is four years. Once the apprenticeship program is completed, further training is usually provided on-the-job under the supervision and instruction of more experienced employees.

**Skills/Aptitudes** Individuals in these occupations should have high school courses in mathematics, science, and industrial arts. A keen interest in working with machines and routine processes is necessary. Some shift work may be required as may also be the ability to work near noise and vibration.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **200**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **60**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M22 WATCH AND CLOCK REPAIRPERSON

**Principal Duties** This occupational group is concerned with repairing, cleaning and adjusting watches, clocks and mechanical movements used in clockwork-operated devices such as timers, meters and recorders.

**Requirements** There are no formal training or certification requirements for entrance into this occupation.

**Training Paths** Individuals entering this occupation typically receive training through on-the-job work experience. In some cases, employees may require some knowledge of electronics.

**Skills/Aptitudes** Individuals interested in this occupation should enjoy working with intricate mechanical and electronic parts.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **70**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

a watch and clock repairperson in your area

# M23 BOILERMAKER, PLATER AND STRUCTURAL METAL FABRICATOR

**Principle Duties** This occupational group is concerned with fabricating, assembling, erecting and repairing boilers; and fabricating structural-metal parts and sub-products for storage tanks, ships, scaffolding, and other structures made from steel plates, tubes, beams or similar materials.

**Requirements** While there are a number of occupations within this group, the main requirement for most of them would be enrollment in the apprenticeship trade of either Boilermaker or Structural Metal Fabricator. Certification for these trades is not compulsory, however, many employers require that their employees be registered apprentices or holders of Certificates of Qualification. Training for the other occupations in this group would be provided on-the-job under the supervision of more experienced employees.

**Training Paths** To enter into either of the two apprenticeable trades mentioned above individuals may seek employment directly with a employer and proceed through the block release program. There are two other alternate routes in which to enter into the trade of Structural Metal Fabricator. Individuals may receive basic training through a two-year program offered at the Provinces regional vocational schools or application may be made to a one-year program offered at the Adult Vocational Training Centre in Cape Breton. Individuals obtaining employment in these trades should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in these trades will have completed the tenth grade or its equivalent. The term of apprenticeship is two years for the Structural Metal Fabricator and three years for the Boilermaker.

**Skills/Aptitudes** Individuals in this trade should possess a good mechanical aptitude and an understanding of the physical properties of materials and methods of assembly.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **230**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 28000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, Nova Scotia
B3J 3B7

# M24 LOCOMOTIVE OPERATING OCCUPATIONS

**Principal Duties** This occupational group is concerned with operating railway locomotives to carry passengers and freight, and to transfer locomotives to various service and repair facilities within the yard and to other yards. Activities include operating controls of locomotives; communicating by radio-telephone; understanding train orders, signals and railway rules and regulations; and inspecting locomotives for adequate fuel supply and proper functioning of equipment.

**Requirements** Individuals in these occupations may be required to complete a training course once employed. A minimum age of eighteen is also required.

**Training Paths** The only training available in this field is in Gimli, Manitoba. This is an eight-week course which the individual takes after being employed in a position such as locomotive engineer. Individuals will have typically completed the tenth or eleventh grade.

**Skills/Aptitudes** Individuals in these occupations generally possess an interest in trains, either model or real. They must be willing to travel and be exposed to noise and vibration. A fair amount of manual dexterity is involved due to the precise nature of some of the duties. The ability to follow instructions and strict regulations is also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **130**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Via Rail
777 Main St.
Moncton, N.B.
E1C 1E9

# M25 CHEFS AND COOKS

**Principal Duties** This occupational group is concerned with planning menus, ordering supplies, and preparing and cooking foods in hotels, restaurants, private households and other non-manufacturing establishments.

**Requirements** Within this occupational group, the occupation of cook is a designated apprenticeable trade. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are several entry paths into this occupation. Individuals may receive basic training through a two-year program offered at the Province's regional vocational schools. Individuals may also seek employment directly with an employer and proceed through the block release program. As a third alternative, individuals may make application through their Canada Employment Centre office for pre-employment courses held at the Burridge Regional Vocational School, the Nova Scotia Institute of Technology in Halifax, and the Cape Breton Adult Vocational Training Centre in Sydney. Theory training for this occupation takes place on a modular basis with modules being completed at the individuals' own pace. Typically, individuals in this trade will have completed the ninth grade or its equivalent. The term of apprenticeship is generally three years. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that may receive credit for their training and experience.

**Skills/Aptitudes** Cooks require the ability to plan menus and order, store, prepare and cook foods, and to understand and apply the rules of hygiene and sanitation.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **4570**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **580**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 16000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M26 OIL BURNER INSTALLER AND MAINTAINER

**Principal Duties** This occupational group is concerned with the installation, maintenance and repair of oil burners in furnaces used to heat commercial and residential buildings. Duties may include performing combustion tests, repairing faulty burners, and performing various preventitive maintenance procedures.

**Requirements** The occupation of oil burner installer is an apprenticeable trade with compulsory certification.

**Training Paths** There are two entry paths into the occupation of Oil Burner. Individuals may make application, through their local Canada Employment Centre office for a pre-employment course held at the Nova Scotia Institute of Technology or individuals may seek employment directly with an employer and proceed through the block release program. Individuals obtaining employment in this trade must register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the tenth grade or its equivalent. The term of apprenticeship is three years.

**Skills/Aptitudes** Individuals in this occupation should be in good physical condition and possess an aptitude for mathematics.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **N/A**
- Employment growth between 1987 and 1995 is projected to be: **N/A**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# M27 TAILORS/ DRESSMAKERS

**Principal Duties** This occupational group is concerned with making, altering, and repairing complete items of made to measure garments such as suits and dresses, and performing the more difficult tasks in the manufacture of ready-to-wear garments. Activities may include sewing sample garments for new designs according to pattern specifications, and fitting and altering made-to-measure foundation garments such as girdles and corsets according to customer's measurements and tastes.

**Requirements** While there are no formal requirements to work in these occupations, a degree in home economics would enhance employment prospects in the manufacturing field.

**Training Paths** Training in this field is available at Mount Saint Vincent University in Halifax through their four-year Bachelor of Home Economics degree with a major in clothing and textiles. This program requires the successful completion of the twelfth grade or its equivalent for admission.

**Skills/Aptitudes** Individuals in these occupations need good eyesight and a liking for fine, close work which may be very detailed and intricate. While artistic imagination and craft skills to turn an idea into a garment are important, it is equally necessary that the individual be prepared to adapt their ideas to other people's tastes. The ability to follow directions closely and accept instructions from both clients and supervisors is also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **330**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# N00 CLERICAL OCCUPATIONS, GENERAL

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 4131 | Bookkeepers and Accounting Clerks |
| 4197 | General Office Clerks |
| 4155 | Stock Clerks and Related Occupations |
| 4171 | Receptionists and Information Clerks |
| 4199 | Other Clerical and Related Occupations, N.E.C. |

**Principal Duties** This occupational group involves occupations, not elsewhere classified, concerned with performing duties of a clerical nature. Activities may include bookkeeping, accounting, classifying and recording information, transferring data into accounts and record, paying and receiving money, examining orders for goods and services, making appointments, and receiving clients and customers.

**Requirements** Individuals considering a career in these occupations are generally required to have received formal training in areas such as bookkeeping, typing and office procedures.

**Training Paths** Courses in bookkeeping, general business, and accounting/bookkeeping are taught at many vocational and private trade schools throughout Nova Scotia. These courses may vary in length from six months to two years. The eleventh grade or its equivalent is generally required for admission. Some occupations within this group, however, require no additional education beyond high school and training is provided on-the-job.

**Skills/Aptitudes** Individuals in these occupations should have an aptitude for working with numbers and/or handling cash, have the ability to perform repetitive tasks, and be knowledgeable of computers and other automated office machinery.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **35190**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **2800**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 20000**

# N01 CLERICAL OCCUPATIONS, TYPING SPECIALTY

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 4111 | Secretaries and Stenographers |
| 4113 | Typists and Clerk-Typists |
| 4110 | Supervisors, Stenographic and Typing Occupations |

**Principal Duties** This occupational group contains a number of occupations including clerk-typists, data processors, stenographers, and word processors who are mainly involved in typing documents of varying lengths. Also contained in this group are secretaries and executive secretaries who take dictation, make appointments, answer telephone calls, type, perform general office duties, and may be involved in the supervising and co-ordinating of other workers.

**Requirements** Individuals entering these occupations are generally required to have received formal training in typing and other secretarial skills.

**Training Paths** There are numerous training programs and short courses offered in Nova Scotia through private trade schools and the provinces regional vocational schools. These courses come under a variety of names and include: clerk- typist, data processing, stenography, secretarial, word processing, legal secretarial, and business education. Some of these courses are offered through local Canada Employment Centres as well. These courses can vary in length from a few weeks to two years depending on the number of topics covered. The emphasis in many cases will be on the use of computers in word processing and office automation. Entrance requirements are generally Nova Scotia grade ten. Additionally, there are three-year degree programs in Secretarial Arts for those wanting more extensive coverage. These programs are available at Acadia University in Wolfville, Mount Saint Vincent University in Halifax and the University College of Cape Breton in Sydney. Generally, grade twelve is required for admission into these programs.

**Skills/Aptitudes** The necessary skills required by individuals in these occupations include a fast typing speed, good grammar and communication skills, and a knowledge of office machinery including computers.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **14290**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1150**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 17000**

**For Further Information Contact**

Halifax Chapter of Professional Secretaries Association
Development Office
Dalhousie University
Halifax, N.S.
B3H 3J5

# O00 SPORT RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3370 | Coaches, Sport and Recreation |
| 3379 | Occupations in Sport and Recreation, N.E.C. |
| 3373 | Athletes |
| 3371 | Referees and Related Officials |

**Principal Duties** This occupational group is concerned with administering and directing athletic programs and with managing, coaching, scouting, refereeing, training and instructing athletes for team sports, both competitive and recreational. Activities may include negotiating contracts with players and arranging involvement in sports events.

**Requirements** While there are no formal requirements for individuals in these occupations, a considerable number of years of working experience combined with a university degree in the field is strongly recommended.

**Training Paths** Individuals interested in obtaining an administrative position in these occupations should obtain a Bachelor's degree in either physical education or recreation. These programs are offered at several universities throughout the Province. The programs are four years in length and successful completion of the twelfth grade or its equivalent is required for entry. A two-year Master's program in both areas is available at Dalhousie University in Halifax for those who have completed their Bachelor's degree. Coaches and instructors must have an exceptional knowledge of their sport which is usually gained through years of experience as a participant in the sport.

**Skills/Aptitudes** There are a wide variety of abilities required for success in these occupations including determination, perseverance, courage, and self-confidence. Also important is the ability to motivate and encourage others to perform to the best of their abilities. Communication skills, both verbal and written, are essential for teaching and instructing others.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **910**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **110**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

**For Further Information Contact**

Sport Nova Scotia
P.O. Box 3010 South
Halifax, N.S.
B3J 3G6

# P01 ELECTRONIC TECHNICIANS AND TECHNOLOGISTS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2165 | Engineering Technicians and Technologists |
| 8735 | Wire Communications and Related Equipment Installing and Repairing |
| 8537 | Radio and Television Service Repairers |
| 8535 | Electronic and Related Equipment Installing and Repairing Occs., N.E.C. |
| 9551 | Radio and Television Broadcasting Equipment Operators |

**Principal Duties** This occupational group involves occupations related to the electronics industry concerned with carrying out various technical and technological functions. Activities may include operating, installing and repairing radio and television transmitters; business and commercial machines; scientific, engineering, optical and medical instruments and apparatus; and photographical, meteorological and similar equipment.

**Requirements** Individuals in this occupation are generally required to possess a certificate or diploma in Electronics from a recognized institute. While certification is not mandatory, increasingly employers are demanding it as part of their employment requirements.

**Training Paths** Courses in Electronics Engineering Technology are available through a two-year program at the Nova Scotia Institute of Technology in Halifax or the University College of Cape Breton in Sydney. A second alternative is a twelve-month course offered at the Adult Vocational Training Centres in Cape Breton and Dartmouth. In addition, two-year Electronics programs are offered at several of the Provinces regional vocational schools. As a final alternative, a two-year marine electronics course is offered at Burridge Regional Vocational School. Completion of the twelfth grade or its equivalent with a strong standing in mathematics and physics is generally specified as the pre-requisite for acceptance into these programs.

**Skills/Aptitudes** Individuals are required to have the ability to understand principles of electronics and mechanical operations. They are required to perform intricate work with their hands and must have good motor skills and manual dexterity. Individuals must be able to collaborate and cooperate with others as they will often be involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **4390**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **250**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 30000**

**For Further Information Contact**

Society of Certified Engineering Technologists & Technicians in N.S.
63 Portland Street, Ste. 1
Dartmouth, N.S.
B2Y 1H1

# P02 ELECTRICAL TECHNICIANS AND TECHNOLOGISTS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 8533 | Electrical and Related Equipment, Installing and Repairing Occs., N.E.C. |
| 9531 | Power Station Operators |

**Principal Duties** This occupational group includes occupations, not elsewhere classified, concerned with installing and repairing electrical equipment such as domestic appliances, industrial machinery, transport vehicles, aircraft and ships. Activities may include mounting and connecting equipment to power sources, analyzing faults with test instruments, disassembling and replacing defective parts and internal wiring, and reassembling and testing operation of equipment.

**Requirements** There are a number of occupations within this group, one of which is the designated apprenticeable trade of Industrial Electrician. This is a designated apprenticeable trade. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification. For the other occupations in this group, it is recommended that the individual have completed an electrical repair course.

**Training Paths** There are two entry paths into the occupation of industrial electrician. Individuals may receive basic training through a two-year program offered at the Province's regional vocational schools or they may seek employment directly with an employer and proceed through the block release program. The term of apprenticeship is four years. Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Additionally, there is a two-year appliance repair course offered at the Dartmouth Regional Vocational School and a two-year refrigeration and air conditioning repair course offered at Halifax, Colchester, and Cape Breton Regional Vocational Schools. Typically, individuals in this trade will have completed the eleventh grade or its equivalent.

**Skills/Aptitudes** Individuals in this occupation should have the ability to apply knowledge of electrical theory, to understand and follow technical instructions, and diagnose equipment malfunctions based on test results and other data.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1530**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **90**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 29000**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# P03 PRECISION INSTRUMENT REPAIR

**Principal Duties** This occupational group is involved in installing and repairing engineering, scientific, and medical instruments and apparatus, and photographical, meteorological and similar equipment.

**Requirements** Training for this occupation is provided through the Industrial Instrumentation apprenticeship program. While certification is not compulsory, many employers require that their employees be registered apprentices or holders of Certificates of Qualification.

**Training Paths** There are two entry paths into the Industrial Instrumentation occupation. Individuals may receive basic training through a two-year program offered at the Provinces Regional Vocational Schools or they may seek employment directly with an employer and proceed through the block release program.

Individuals obtaining employment in this trade should register with the Apprenticeship Section of the Department of Advanced Education and Job Training in order that they may receive credit for their training and experience. Typically, individuals in this trade will have completed the eleventh grade or its equivalent with strong standing in physics and mathematics. The term of apprenticeship is four years.

**Skills/Aptitudes** Individuals are required to have the ability to understand principles of electronics and mechanical operations. They are required to perform intricate work with their hands and must have good motor skills and manual dexterity.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **160**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Program Development
Apprenticeship Section
Department of Advanced Education and Job Training
P.O. Box 2086, Station M
Halifax, N.S.
B3J 3B7

# Q00 PROFESSIONAL SALES OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 1137 | Sales and Advertising Management Occupations |
| 5130 | Supervisors: Sales Occupations, Commodities |
| 5133 | Commercial Travellers |
| 5171 | Insurance Sales Occupations and Agents |
| 5172 | Real Estate Sales Occupations |

**Principal Duties** This occupational group includes a wide variety of occupations, not elsewhere classified, concerned with professional sales activities. Duties may include selling commodities and services such as real estate, insurance, business services, or technical equipment; conducting wholesale or retail businesses; and supervising and coordinating the activities of workers directly or indirectly involved in sales occupations.

**Requirements** Specific entrance requirements only exist for some of the occupations in this group and depend on the type of product or service being sold.

**Training Paths** Because of the diversity of products and services covered under these occupations, the number of training paths varies greatly. For example, individuals in real estate sales must be licensed by the Consumer Services Bureau of the Department of Consumer Affairs in Halifax. This license is granted after successful completion of the pre-licensing course from the Nova Scotia Real Estate Association. The Canadian Securities Institute in Toronto offers a correspondence course for those interested in selling securities. This course may be taken in a three or a six-month period. There are no age or educational requirements for acceptance. Testing for this course is done at St. Mary's University in Halifax. Other sales positions may require a technical knowledge of the product or service which may be gained through vocational school while others may require a broad business background obtained through a commerce or business administration degree. Training for some sales positions, such as car sales, may be obtained on-the-job.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **18760**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **1550**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 29000**

# R01 MUSICIANS AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3332 | Musicians |
| 3333 | Occupations in Music, N.E.C. |

**Principal Duties** This occupational group is involved in playing musical instruments; singing as a soloist or member of a vocal group; composing, adapting, arranging, or copying music; and conducting instrumental or vocal performances.

**Requirements** While there are no formal requirements for entrance into these occupations, a high degree of talent in addition to a university degree are strongly recommended. In order to perform in an establishment as a paid performer, one must be registered with the Atlantic Federation of Musicians.

**Training Paths** There are two ways to recieve training in these occupations. A Bachelor's degree in music can be obtained from Dalhousie University, Halifax; Acadia University, Wolfville; and St. Francis Xavier University, Antigonish through a four-year program requiring the completion of the twelfth grade or its equivalent for entry. These programs emphasize both the theoretical and practical aspects of music. Alternatively, the individual may take private lessons in voice or instruments in order to obtain the necessary skill level. The content and emphasis of private lessons is entirely up to the individual teacher and student. Examiners from the Royal Conservatory of Music visit many communities in the spring of each year to conduct testing for those students who wish to be graded on the skills learned.

**Skills/Aptitudes** The most essential qualities for a musician to possess are talent, dedication, and an ability to accept constructive criticism. Musicians must be willing to travel and put in long hours of practice. Technical and artistic skills are necessary as are abilities in tone production, sight reading and improvising.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **510**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **90**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 23000**

**For Further Information Contact**

Atlantic Federation of Musicians
6307 Chebucto Road
Halifax, N.S.
B3L 1K9

# R02 PERFORMING AND AUDIOVISUAL ARTS AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3337 | Radio and Television Announcers |
| 3330 | Producers and Directors, Performing and Audiovisual Arts |
| 3339 | Occupations in Performing and Audiovisual Arts, N.E.C. |
| 3335 | Acting Occupations |

**Principal Duties** This occupational group is involved in acting, announcing, producing, and directing in motion picture, theatre, radio and television for the audiences' entertainment, information, and instruction.

**Requirements** There are no formal requirements for entrance into these occupations, however, the chances of gaining employment increase with the amount of education and training obtained.

**Training Paths** A wide range of courses and programs exist for the various occupations in this group. Dalhousie University in Halifax offers undergraduate degrees in theatre and costume studies. These are three-year programs which require completion of the twelfth grade with a strong standing in English for entrance. A variety of other programs exist in specialty areas of these occupations in schools, universities, theatres, and drama leagues throughout Canada. Other sources of information should be sought for more detail on these programs.

**Skills/Aptitudes** Individuals in these occupations should enjoy acting and other forms of verbal expression. A certain amount of creativity and imagination is also necessary. The ability to get along well with others and express ideas and thoughts clearly is required. The work is freelance, giving the individual a self-employed status, and may not always fit into a normal 9-5 routine.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **790**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **130**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Alliance of Canadian Cinema,T.V., and
Radio Artists (ACTRA)
5510 Spring Garden Road
Halifax, N.S.
B3J 1G5

or

Canadian Actors Equity Assoc.
260 Richmond St., East
Toronto, Ont.
M5A 1P4

# R04 PRODUCT AND INTERIOR DESIGNERS

**Principal Duties** This occupational group includes individuals who create designs for industrial and commercial products and institutional, commercial and residential interiors. Activities may include developing designs for manufactured products; designing window displays; designing sets for motion picture, television and stage productions; and space planning and architectural drafting for interior portions of the project.

**Requirements** While there are no set educational or certification requirements to work in these occupations, courses in drawing, drafting, or designing may be helpful in obtaining employment.

**Training Paths** Training in the area of drawing and designing may be obtained from the Nova Scotia College of Art and Design in Halifax through their Fine Arts degree program. A degree program in theatre scenography is offered at Dalhousie University, also located in Halifax. The minimum entrance requirement for these four-year courses is the completion of twelfth grade or its equivalent. Courses in graphic design are offered at the Annapolis, Cape Breton and Colchester Regional Vocational Schools. These courses are two years in length and generally require the completion of the tenth grade or its equivalent for entry. While there are no courses in interior design available in Nova Scotia, there are colleges and technical institutes in Ontario which do offer such programs. More information may be obtained by writing to the address below.

**Skills/Aptitudes** Individuals in these occupations should be creative, imaginative, artistic, have a good sense of color and design, be able to visualize three-dimensional drawings, and be able to work well with others.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **390**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **70**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Interior Designers of N.S.
Box 2042, Station M
Halifax, N.S.
B3J 3B4

# R05 PAINTERS, SCULPTORS, AND ILLUSTRATING ARTISTS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3314 | Advertising and Illustrating Artists |
| 3311 | Painters, Sculptors and Related Artists |

**Principal Duties** This occupational groups is involved with the creating of original artistic works, personally interpreted through painting, drawing, engraving, sculpturing, and etching. Activities may include creating illustrations, designs, cartoons and caricatures for various purposes related to advertising, instructing, and entertainment.

**Requirements** For individuals interested in these occupations, there are no formal requirements, however the completion of a training program may be helpful in gaining employment.

**Training Paths** For those who wish to receive formal training in any of these areas, a four-year university degree program in Fine Arts is available at the Nova Scotia College of Art and Design in Halifax. As there are no standard entrance requirements, interested applicants should consult the Art College for details. In addition, Mount Saint Vincent University in Halifax offers a three-year Arts program with a major in Fine Arts. Completion of the eleventh grade or its equivalent is required for admission into this program.

**Skills/Aptitudes** A natural ability to draw, paint or sculpt is desirable, along with a good sense of creativity and imagination. The ability to visualize a finished piece of work from a sketch or brief description is also necessary. An interest in art and art history are usually part of the individuals interests.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **760**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **120**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 28000**

# S04 PHYSICAL SCIENCES TECHNICIANS, TECHNOLOGISTS AND RELATED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2117 | Physical Sciences Technologists and Technicians |
| 2119 | Occupations in Physical Sciences, N.E.C. |

**Principal Duties** This occupational group operates within a physical science specialization such as physics, geology, chemistry, geophysics, astronomy or meteorology. Duties include carrying out technological or technical functions using a knowledge of scientific and mathematical principles and laboratory practices. Activities may include participating in research and experiments.

**Requirements** The specific entrance requirements for entry into these occupations varies widely depending on the area of specialization, however, some level of post-secondary education is required in all cases.

**Training Paths** The most common requirement is a technology course with a physical science specialization. The University College of Cape Breton in Sydney offers two-year courses in chemical and mineral technology. For those specializing in meteorology, a four-month, employer-sponsored course is available at the Transport Canada Training Institute in Cornwall, Ontario. Other specializations in this field require a university degree in either metallurgical, mineral, or chemical engineering. These five-year programs are all offered at the Technical University of Nova Scotia in Halifax. The completion of the twelfth grade or its equivalent is required for entry into all of these courses.

**Skills/Aptitudes** The skills and aptitudes for these occupations are as varied as the entrance requirements. An aptitude for math and science at the high school level is necessary for entrance into these programs. Some jobs require individuals to be exposed to heat, noise, vibration, fumes and dust while others are located in a relatively clean laboratory environment. An interest in scientific and technical work, and the ability to work with detailed processes, machines and techniques is also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **550**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 34000**

**For Further Information Contact**

National Research Council
Employment Office
Ottawa, Ont.
K1A 0R6

# S05 LIFE SCIENCES TECHNICIANS, TECHNOLOGISTS AND RELATED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2135 | Life Sciences Technologists and Technicians |
| 2139 | Occupations in Life Sciences, N.E.C. |

**Principal Duties** This occupational group is concerned with carrying out technological and technical functions in a life sciences specialization such as forestry, botany, zoology, horticulture or agriculture, using a knowledge of scientific and mathematical principles and laboratory practices. Individuals may be involved in conducting research in the life sciences.

**Requirements** Individuals in these occupations have at least one of the following: completion of an appropriate vocational school program, a program at the Nova Scotia Institute of Technology, or a university undergraduate degree.

**Training Paths** Depending on the area of interest to the individual, training may be taken at one of the Province's regional vocational schools, at one of several universities which offer undergraduate science programs, or at the Nova Scotia Institute of Technology in Halifax. Programs at the vocational schools and at the Nova Scotia Institute of Technology are generally one or two years in length and require the completion of the twelfth grade or its equivalent for entry. University programs are three to four years in length and also have a minimum entrance requirement of grade twelve or its equivalent.

**Skills/Aptitudes** Individuals working in these occupations should have a scientific aptitude and enjoy technical-type work. They must be able to work independently and as a member of a team while performing precise, analytical tasks.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **540**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 31000**

**For Further Information Contact**

National Research Council
Employment Office
Ottawa, Ont.
K1A 0R6

# S06 SURVEYORS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2161 | Surveyors |
| 2169 | Other Occupations in Architecture and Engineering, N.E.C. |

**Principal Duties** This occupational group is concerned with surveying land surfaces to delineate boundaries and exact locations, describe topographic features and measure land areas for map-making and construction work; surveying surface and underground features of mines; and surveying sea, river and lake beds. Activities may include chart making, determining navigable channels, and analyzing aerial photographs to prepare or revise topographic maps.

**Requirements** Individuals in this occupation must be registered with the Association of Nova Scotia Land Surveyors.

**Training Paths** Academic training is available through one of two methods. The first is a two-year surveying program at the Nova Scotia College of Geographic Sciences in Lawrencetown which is coupled with the completion of two years in the survey engineering course at the University of New Brunswick in Fredericton. Alternatively, there is a five-year survey engineering degree program at the University of New Brunswick. After the completion of either program the student must then pass Atlantic Surveyor's Board exams, article with a licensed Nova Scotia land surveyor for a period of two years, write exams in Statute and Association Law, and then carry out an assigned retracement survey. The minimum entrance requirement is completion of the twelfth grade or its equivalent.

**Skills/Aptitudes** To work in this occupation, an individual should enjoy working outdoors and be able to carry equipment over long distances by foot. They should have an aptitude in mathematics and physics at the high school level and be able to perform mathematical calculations quickly. Good health, eyesight and manual dexterity are also necessary.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1170**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **60**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 30000**

**For Further Information Contact**

Association of N.S. Land Surveyors
159 Portland Street, Suite 204
Dartmouth, N.S.
B2Y 1H9

# S07 DRAFTING

**Principal Duties** This occupational group is concerned with preparing drawings from designer's diagrams and specifications to be used for machine manufacturing or for constructing buildings, dams, roads and other civil engineering projects. Activities include drafting topographical, economic, nautical and other maps and charts; illustrating technical manuals dealing with assembly, installation, operation, maintenance and repair of machinery and other equipment; and duplicating plans and drawings. Drafting often involves the use of computer assisted drafting equipment.

**Requirements** While there are no formal requirements for individuals working in this occupation, completion of a drafting program is strongly recommended.

**Training Paths** Individuals entering this occupation may receive their training through a one- or two-year drafting course offered at the Province's regional vocational schools or at either of the Adult Vocational Training Centres in Dartmouth and Cape Breton. Entrance requirements for these courses is generally grade eleven.

**Impact of Technological Change** The introduction of computer automated drafting has had a dramatic impact on this occupation, both in terms of employment and in terms of the type of work undertaken by draftpersons. The end result of this change is uncertain at present but individuals considering entering into the occupation should be very familiar with the computer-assisted drafting techniques.

**Skills/Aptitudes** To enter into this occupation, individuals should have a talent to draw and sketch, a desire for accuracy and efficiency, and be neat and systematic in their approach to projects.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **930**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

# S08 COMPUTER PROGRAMMERS AND SYSTEMS ANALYSTS

**Principal Duties** This occupational group is concerned with writing computer programs to manipulate or organize large volumes of information; planning, implementing and supervising computer processing services; and adapting computer software packages for specific applications.

**Requirements** Individuals in these occupations are generally required to have a diploma in computer programming, computer graphics, or computer science technology, or a university degree in computer science.

**Training Paths** In Nova Scotia, a one-year diploma program is offered at the Nova Scotia College of Geographic Sciences in both computer graphics and scientific applications programming. Acadia University in Wolfville offers a four-year Bachelor of Computer Science program, and in Halifax, Dalhousie University offers three and four-year Bachelor of Arts and Bachelor of Science degree programs with a major in Computer Science. The Technical University of Nova Scotia also offers a five-year Bachelor of Computer Science degree. A forty-eight week Business Computer Programming course and a forty-week program in computer technology are offered at the Nova Scotia Institute of Technology in Halifax. These programs require completion of the twelfth grade or its equivalent for entry. For some systems analyst positions, a degree in mathematics or physics may be acceptable. Engineering firms may require a degree in Engineering. Entrance requirements for each of these institutions include completion of the twelfth grade or its equivalent with good standing in mathematics and science.

**Skills/Aptitudes** Computer programmers and systems analysts should have a sense for precision and detail, possess good methodical, analytical and organizational skills, and be able to communicate well both orally and in writing. Typing skills are an asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **900**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **50**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 36000**

# S09 OCCUPATIONS IN WELFARE AND COMMUNITY SERVICE

**Principal Duties** This occupational group is concerned with providing social services to individuals, families and groups, and with providing assistance to professional social workers. Duties may include planning and supervising recreational, social and cultural activities in youth or family camps, community centres, playgrounds and other settings, and caring for residents of half-way houses, group homes and similar establishments.

**Requirements** While there are no formal entrance requirements into these occupations, a university degree is usually considered to be the minimum requirement necessary for employment.

**Training Paths** The type of training will depend on the area of interest. If the individual wishes to work as either a recreation director or leader, then a four-year Bachelor of Recreation degree would be most appropriate. A four-year degree in recreation is offered at Acadia University in Wolfville and Dalhousie University in Halifax. The minimum entrance requirement is grade twelve with an emphasis in math and science. For those interested in working with children, a four-year Bachelor of Child Studies is available at Mount St. Vincent University in Halifax. This program requires grade twelve for admission. For those wishing to work as a social worker assistant, a community services certificate course is available through the Department of Community Services and is taught at the Nova Scotia Institute of Technology in Halifax. This is a ten-month course and is available to those with completion of the twelfth grade or its equivalent plus two years of related work experience.

**Skills/Aptitudes** Individuals in these occupations tend to be outgoing, energetic and good listeners. The ability to communicate well is essential. An interest in helping others on a one to one basis or through a group situation is required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1850**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **120**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 20000**

**For Further Information Contact**

N.S. Family and Child Welfare Association
1574 Argyle Street, Ste. 3
Halifax, N.S.
B3J 2B3

# S10 OCCUPATIONS IN LAW, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group includes occupations, not elsewhere classified, involved in the application of legal principles to assist members of legal professions and to act as officers of courts of law. Activities include representing clients looking for patent application or trademark registration, handling routine legal and administrative duties under the supervision of a lawyer, searching public records, and procuring documents required to clear land titles.

**Requirements** There are no formal entrance requirements for individuals in these occupations.

**Training Paths** The only educational training available in these occupations is at the University College of Cape Breton in Sydney through their Business Technology program with a concentration in Paralegal. This is a two-year program requiring completion of the twelfth grade for admission. In many of these occupations the only other form of training available is done on-the-job by the employer.

**Skills/Aptitudes** Individuals in these occupations should have an interest in the legal profession and possess excellent verbal and written communication skills. The ability to comprehend and follow instructions is important. Good interpersonal skills and tact are definite assets in dealing with clients.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **160**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# S11 LIBRARY AND MUSEUM TECHNICIANS/SUPERVISORS

**Principal Duties** This occupational group is concerned with activities involved in the library, museum and archival sciences and includes library technicians who assist in developing, organizing, and maintaining a collection of library materials and assist library users in the use of the related materials; and museum cataloguers who are involved in compiling information on items in a museum or gallery collection. Individuals may also be involved in supervising and organizing the activities of other workers.

**Requirements** Individuals in these occupations generally require formal training before they will be hired by an employer.

**Training Paths** A two-year library technician program is offered at Kings Regional Vocational School. Completion of the tenth grade or its equivalent is required for entry. Individuals interested in museum cataloguing or other museum-related occupations may follow one of two routes in Nova Scotia. The University College of Cape Breton in Sydney offers a Bachelor of Arts in Museum Studies. The general entrance requirement to this program is completion of the twelfth grade or its equivalent. An alternate route is to obtain employment directly with an employer. Formal training or museum experience is desirable. One introductory class is available at Mount Saint Vincent University in Halifax involving three hours of class time per week for one academic year, and includes occasional field work. As this class would not necessarily provide the needed background, it is recommended that interested individuals volunteer at their local museum or gallery in order to gain experience.

**Skills/Aptitudes** Individuals in these occupations should possess good communication skills, both verbal and written, as they may be required to transfer information to colleagues, staff, and the general public. Typing skills are also important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **90**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Nova Scotia Library Association
c/o N.S. Provincial Library
6955 Bayers Road
Halifax, N.S.
B3L 4S4

# S12 OCCUPATIONS IN RELIGION

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2511 | Ministers of Religion |
| 2510 | Occupations in Religion, N.E.C. |
| 2513 | Nuns and Brothers |

**Principal Duties** This occupational group is primarily concerned with ministering to the spiritual needs of a congregation or community of a religious faith through the provision of motivation, leadership, religious training and guidance. Responsibilities may include preparing and conducting services of public worship, administering sacraments, supervising and conducting religious teaching, and performing other related functions. This group also includes nuns and brothers of religious orders. Graduates of programs in religion have entered into many diversified fields such as teaching, management, the ministry, social work, counselling and historical research.

**Requirements** Employment in these occupations usually requires an undergraduate degree in Arts, Theology, or Religious Studies, plus the completion of a Master's degree in Theology, Divinity or Religious Studies.

**Training Paths** Three- and four-year undergraduate programs are available at five universities in the Province, the minimum entrance requirement being completion of the twelfth grade or its equivalent. Master's programs are available at Acadia University in Wolfville and at the Atlantic School of Theology in Halifax. These programs are either two or three years in length and require a Bachelor's degree for entrance.

**Skills/Aptitudes** Individuals should be mature, self-disciplined, sensitive to the needs of others, and have a keen interest in serving people. Oral and written communication skills plus good organizational abilities are necessary.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1300**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 18000**

**For Further Information Contact**

Canadian Association for Pastoral Education
40 St. Clair Ave. East
Toronto, Ontario
M4T 1M9

# S14 PHOTOGRAPHIC AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3315 | Photographers and Camera Operators |
| 9555 | Sound and Video Recording and Reproduction Equipment Operators |

**Principal Duties** This occupational group is concerned with photographing people, events, scenes, objects and products with still, motion-picture and television cameras. Activities include applying artistic and special effects, preparing and arranging subject matter, and planning and setting up special photographic equipment. Individuals may be involved in recording and reproducing video and audio images for radio and television broadcasting and motion-picture, tape, and phonograph record production.

**Requirements** While there are no formal requirements for entry into these occupations, completion of an educational training program is a definite asset.

**Training Paths** Training in these occupations is available at the Halifax Regional Vocational School through their one-year photography course. It is available to those with grade eleven or its equivalent. The Nova Scotia College of Art and Design in Halifax also offers photography through their Bachelor of Design degree program. This is a four-year undergraduate degree course which typically requires grade twelve for admission.

**Skills/Aptitudes** Photographers require the ability to improvise with equipment and/or technique. They must react quickly if they see a good shot or be very patient in other cases, waiting for the precise moment to take the picture. Photographers need creativity, imagination, and artistic talent. Attention to detail is also very important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **400**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Maritime Professional Photographers Association
221 Reade Street
Moncton, NB
E1C 6S7

# S15 OCCUPATIONS IN WRITING

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3352 | Writers and Editors |
| 3359 | Occupations in Writing, N.E.C. |

**Principal Duties** This occupational group is concerned with writing and editing scripts for motion-pictures, stage presentations, advertising, and broadcast programs; writing and editing activities for newspapers, magazines and books; and selecting, interpreting and editing news and other materials for information or entertainment through radio or television broadcasting.

**Requirements** Individuals in these occupations are not generally required to possess a specific education level, although a journalism or liberal arts degree is usually recommended.

**Training Paths** Training in the area of journalism is provided at Kings College in Halifax through its Bachelor of Journalism program. Arts degrees with a major in English are offered at most universities throughout the Province. St. Mary's University also offers a Bachelor's degree in Arts with a minor concentration in creative writing. All of these programs are either three or four years in length and the minimum entrance requirement is completion of the twelfth grade or its equivalent.

**Skills/Aptitudes** Individuals in these occupations should possess good typing/word processing skills, excellent writing skills, resourcefulness and creativity. A critical mind and good organizational abilities are also necessary.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **940**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **60**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Writers Federation of Nova Scotia
P.O. Box 3608, Halifax South
Halifax, N.S.
B3J 3K6

# S17 ELECTRONIC DATA-PROCESSING EQUIPMENT OPERATORS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 4143 | Electronic Data-Processing Equipment Operators |
| 4140 | Supervisor, Office Machine and Electronic Data Processing Equipment Operators |

**Principal Duties** This occupational group is primarily concerned with operating electronic data-processing equipment for recording, storing, categorizing, positioning, and computing data; extracting, comparing and reporting information; and making duplicates. Individual may be involved in operating electronic electromechanical machines that record, store, process and transfer data to and from magnetic disks, tapes, or other sources.

**Requirements** Individuals in these occupations must have a good background in computers.

**Training Paths** The two major occupations in the group are data-entry clerk and electronic data processing operator. Data-entry clerks must be able to type at a fast rate. There are numerous training programs for typists throughout Nova Scotia, varying in length from a few weeks to two years. Contact the County School Board in your area or the Nova Scotia Department of Advanced Education and Job Training for further information regarding the typing programs nearest you. Electronic data-processing operators may receive their training through data-processing technology programs offered at four of the Province's regional vocational schools. The programs range from one to three years in length and generally require the completion of the eleventh grade for entry. The Nova Scotia Institute of Technology in Halifax offers a forty-eight-week business computer programming course and a forty-week program in computer technology, both requiring completion of the twelfth grade or its equivalent for entry. The University College of Cape Breton in Sydney offers a three-year program in data-processing also requiring completion of the twelfth grade or its equivalent for admission. Individuals may also receive their training on-the-job.

**Skills/Aptitudes** Individuals in these occupations must enjoy working with computers. They should also possess a good analytical ability and manual dexterity. Typing skills are necessary for the clerical occupations in this group.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1880**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **110**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 20000**

# S22 AIR PILOTS/ FLIGHT OFFICERS/ FLIGHT ENGINEERS

**Principal Duties** This occupational group is concerned with piloting and navigating fixed-wing airplanes and helicopters, directing the course of airplanes and helicopters, inspecting airplane systems and equipment before flight, tending to instrument gauges and controls during flight, and conducting in-flight adjustments and repairs.

**Requirements** The minimum requirement for airline pilots is a Canadian Commercial Pilot's License with night endorsement, Instrument Flight Rating, and a Canadian Radio Telephone License. Each pilot must have a valid Transport Canada medical certificate, which is renewed regularly.

**Training Paths** While there is no training available for these occupations in Nova Scotia, two- and three-year programs in aviation technology are offered at colleges in Central and Western Canada. Completion of the twelfth grade or its equivalent with good standing in mathematics and science is generally required for entry. Upon completion, students should possess a Commercial License, Multi-Engine Endorsement, and a current Instrument Flight Rating. As well, they should have logged about 250 hours of flying time. Since employers prefer to hire pilots with over 3000 hours of flying experience, the student should put in additional flying time. Although it is a more expensive route, students may obtain their Commercial License through instruction given at private flying clubs or training schools.

The Canadian Armed Forces has a seven-month pilot training program. Candidates must hold a university degree and meet height and medical standards.

**Skills/Aptitudes** Individuals in these occupations should have a well-balanced personality, self-confidence, a strong sense of responsibility, leadership and initiative. Good communication skills, both oral and written, are essential. Individuals should possess manual dexterity, perfect eyesight and a mechanical aptitude and must have excellent physical and mental health. High school students interested in flying can gain valuable experience by joining the Air Cadets in their area.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **180**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Air Canada
Personnel Office
5251 Duke St., Ste 500
Duke Tower
Halifax, N.S.
B3J 1P4

or

Canadian Airlines International
Personnel Office
P.O. Box 178
Elmsdale, N.S.
B0N 1M0

# S23 AIR TRANSPORT SUPPORT OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 9113 | Air Transport Operating Support Occupations |
| 9110 | Supervisors, Air Transport Operating Occupations |

**Principal Duties** This occupational group is concerned with providing direct ground support to air transport operations. Responsibilities may include supervising and co-ordinating activities of workers.

**Requirements** There are a number of occupations within this group, one of which is Air Traffic Controller. An Air Traffic Controllers' License must be obtained from Transport Canada in order to work in this occupation.

**Training Paths** Students interested in air traffic control must apply to Transport Canada for training. Candidates must undergo a number of tests, an interview, and medical and eye exams. If a candidate successfully completes the above, he/she is able to attend the federal training institute in Cornwall, Ontario. This involves on-the-job training as well as classroom theory, and usually takes about twenty-four months to complete. Candidates who successfully complete the course receive an Air Traffic Controller's license. Training for the other occupations in this group is provided by an employer through on-the-job training.

**Skills/Aptitudes** Applicants should be at least eighteen years old and have completed the twelfth grade. Good health and eyesight are required.

## Nova Scotia Labour Market Conditions:

**Employment**
- Estimated Employment in 1987: **390**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**
- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**
- Estimated annual average earnings in 1987: **$ 31000**

**For Further Information Contact**

Regional Staffing Officer
Transport Canada
P.O. Box 42
Moncton, N.B.
E1C 8K6

# S24 PRINTING, ENGRAVING AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 9511 | Typesetting and composing occupations |
| 9510 | Foremen/women, printing and related occupations |
| 9514 | Printing/engraving and related occupations |
| 9515 | Photoengraving and related occupations |

**Principal Duties** This occupational group is concerned with various aspects of the printing process and may involve setting type by hand or machine; operating linotype, monotype and photo-typesetting machines; engraving and etching plates and cylinders; preparing metal or plastic printing plates; photographing type; and making printing plates by the electrostatic process (photoengraving).

**Requirements** While there are no formal requirements for individuals entering these occupations, the completion of courses in these areas will greatly enhance employment prospects.

**Training Paths** Although there are no formal requirements for entry into these occupations, a number of related courses are available. A course in Offset Printing is offered at two of the Province's regional vocational schools. At Kings Regional Vocational School in Kentville, the course is one year in length and requires completion of the tenth grade or its equivalent for entry. Memorial High School in Sydney offers a three-year course requiring completion of the ninth grade or its equivalent for entry. A one-year advanced course in Four Color Process Printing is offered at Kings Regional Vocational School, requiring at least one full year of job experience in the printing industry or completion of a printing course with a 75% average. The Nova Scotia College of Art and Design in Halifax offers introductory and intermediate courses in printmaking. This institute should be contacted regarding further information on this course.

**Skills/Aptitudes** Individuals in these occupations should have the ability to work well with their hands. Effective communication skills and the ability to work with others is important. Physical strength may also be an asset to some positions in these occupations.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **400**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Council of Printing Industries of Canada
620 University Ave., 11th fl.
Toronto, Ont.
M5G 2C1

# S26 MOTION PICTURE PROJECTIONIST

**Principal Duties** This occupational group is concerned with operating motion picture projection and related equipment in theatre or similar establishments to produce coordinated motion picture entertainment. Activities may include repairing breaks in film using film splicer, cleaning lenses, oiling equipment, and making minor repairs and adjustments. Individuals may operate slide projector or stage spotlight if required.

**Requirements** Motion picture projectionists must possess a license from the Nova Scotia Department of Consumer Affairs.

**Training Paths** An individual must be at least 18 years old to seek employment in this occupation. The interested individual must first find a licensed projectionist who is willing to supervise the training. An apprenticeship license must then be obtained from the Department of Consumer Affairs. After completing 400 hours of supervised training, the individual is then eligible to do the examination which includes both a written and a practical section. Once this is passed, the individual then receives a cinematograph operator license.

**Skills/Aptitudes** For individuals in this occupation, an interest in film and movies is an asset. The ability to make minor repairs to the projector and repair breaks in the film is also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **110**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Amusements Regulation Division
Department of Consumer Affairs
P.O. Box 998
Halifax, N.S.
B3J 2X3

# S19 FIREFIGHTING OCCUPATIONS

**Principal Duties** This occupational group is concerned with providing protection and help in case of fire. Duties include firefighting, checking firefighting equipment for serviceability, pinpointing fire hazards, and advising on appropriate steps toward fire prevention.

**Requirements** There are no formal educational or certification pre-requisites to work in these occupations.

**Training Paths** Upon obtaining employment in these occupations, an individual will receive between one and three months of on-the-job training. In addition, upgrading courses in all areas of firefighting and rescue operations may be taken at the Nova Scotia Firefighters School in Waverly. These courses are usually sponsored by the employer.

**Skills/Aptitudes** Individuals in this occupation must be in excellent health, able to tolerate stress, high risks, and the unexpected. The ability to react quickly is also necessary.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **820**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 32000**

# S20 POLICE OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6612 | Police Officers and Detectives, Government |
| 6619 | Other Protective Service Occupations, N.E.C. |
| 6113 | Police Agents and Investigators, Private |

**Principal Duties** This occupational group is concerned with protecting the public, maintaining law and order, detecting and safeguarding against crime, directing traffic, enforcing parking laws, investigating and apprehending suspects in criminal cases, and locating lost or missing persons and property.

**Requirements** While there are no set educational or certification requirements to work in these occupations, increasingly, post-secondary education is becoming necessary to gain employment.

**Training Paths** Although there is no direct training available in Nova Scotia for this occupation. Holland College in Prince Edward Island offers a one-year police science program to train police officers. A high school diploma is the minimum entrance requirement.

**Skills/Aptitudes** Individuals in these occupations should be aware of age, height, eyesight and weight guidelines and possess a valid driver's license. Additionally, individuals must be able to give and accept orders, make decisions quickly, and use common sense at all times. Physical strength and mental stability are also required. Good observational skills and the ability to gain the respect of the public are recommended.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1750**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 34000**

**For Further Information Contact**

Police Association of Nova Scotia
P.O. Box 1557
Halifax, N.S.
B3J 2Y3

# S21 FUNERAL DIRECTORS AND EMBALMERS

**Principal Duties** This occupational group is involved in arranging and directing funerals and preparing bodies for burial. Responsibilities of funeral directors include organizing the removal of the body to mortuary, obtaining data on deceased through family or other authorized persons, filing appropriate reports, helping to choose casket and type of funeral, and handling publication of death notices. The duties of embalmers include washing the corpse, draining blood form the body and replacing it with embalming fluid, and applying cosmetics.

**Requirements** Registration with and licensing by the Board of Registration of Embalmers and Funeral Directors is compulsory to work in these occupations.

**Training Paths** To become an embalmer in Nova Scotia, an individual must have completed a minimum of grade eleven or its equivalent and a two-year on-the-job training program under the supervision of a licensed embalmer. In order to become a funeral director the individual must complete a six-month training period under a licensed funeral director and pass a written examination. Embalmers' and funeral directors' manuals are sold at the Nova Scotia Department of Consumer Affairs.

**Skills/Aptitudes** Funeral directors and embalmers should feel comfortable working with the deceased and should be able to comfort people in times of distress. Funeral directors are often called in the middle of the night and must show consideration and tact at all times.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **430**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

N.S. Board of Registration for Embalmers and Funeral Directors
c/o N.S. Department of Consumer Affairs
P.O. Box 998
Halifax, N.S.
B3J 2X3

# T01 ADMINISTRATORS, NOT ELSEWHERE CLASSIFIED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 1130 | General managers and other senior officials |
| 1113 | Government administrators |
| 1115 | Postal management occupations |
| 1119 | Officials and Administrators unique to government, N.E.C. |

**Principal Duties** This occupational group includes occupations, not elsewhere classified, in senior and middle administration concerned with performing managerial functions such as planning, organizing, directing and controlling in an industrial, commercial, governmental or other enterprise, establishment or organization.

**Requirements** Individuals in these occupations are generally required to possess a Bachelor's degree in Business Administration or Commerce. A Master's degree in Business Administration or Public Administration is recommended.

**Training Paths** The four-year Bachelor's degree in Business Administration or Commerce is available at most of the universities throughout Nova Scotia. Areas of concentration may vary depending on the industry of interest. Completion of the twelfth grade or its equivalent is generally required for entry into these programs. A two-year Master's degree in Business Administration is offered at Dalhousie University and at Saint Mary's University, both located in Halifax. Dalhousie University also offers a two-year Master's degree in Public Administration. An undergraduate degree is generally required for entrance into the Master's level programs.

**Skills/Aptitudes** Individuals entering these occupations should possess good interpersonal skills as well as effective verbal and written communication skills. Leadership qualities, the ability to motivate individuals, and good organizational skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **2930**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **160**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 52000**

# T04 PERSONNEL RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 1174 | Personnel and related officers |
| 1136 | Personnel and industrial relations management occupations |

**Principal Duties** This occupational group is concerned with the effective management of people at work. Activities may include planning, organizing, directing, controlling, implementing and maintaining policies and programs covering a wide spectrum of personnel specialties such as recruitment and selection, human resources development and training, compensation, industrial relations, health and safety, termination and relocation counselling.

**Requirements** Individuals in these occupations are generally required to have a Bachelor of Business Administration or Commerce degree. A Master's degree in Business Administration with a concentration in personnel or organizational behaviour is recommended for individuals interested in management positions.

**Training Paths** Degree programs in Business Administration and Commerce are available at most universities throughout the province and are three to four years in length. Successful completion of the twelfth grade or its equivalent is generally required for entry. Business programs at the Master's level are available at Saint Mary's University and Dalhousie University, both located in Halifax. These programs are two years in length and require an undergraduate degree in any field for entry.

**Skills/Aptitudes** Individuals entering these occupations should possess good interpersonal skills as well as effective verbal and written communication skills. Leadership qualities, the ability to motivate individuals, and good organizational skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1590**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **90**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 36000**

**For Further Information Contact**

Halifax and District Personnel Association
P.O. Box 592
Halifax, N.S.
B3J 3C8

or

Canadian Public Personnel
Management Association
N.S. Chapter
c/o Civil Service Commission
P.O. Box 943
Halifax, N.S.
B3J 2V9

# T05 PURCHASING MANAGEMENT OCCUPATIONS

**Principal Duties** This occupational group is involved in performing administrative and managerial functions such as planning, organizing, directing and controlling in areas such as government, industry, business and other agencies concerned with purchasing products or services for resale materials.

**Requirements** While there are no formal requirements for entrance into this occupation, a number of years experience as a purchasing officer plus courses in accounting, business law and economics are strongly recommended.

**Training Paths** Experience in junior positions is usually required for promotion to this post. Individuals usually complete from two to four years of on-the-job training and related experience before they are considered proficient. Most employers expect their purchasing managers to enroll in the Professional Purchaser Diploma Program offered by the Purchasing Management Association of Canada. The program is available by either correspondence or lecture and can be completed within eight years.

**Skills/Aptitudes** Purchasing managers need excellent communication and negotiating skills along with common sense and initiative. Basic mathematical skills and the ability to analyze detailed information accurately and quickly in order to make decisions is also necessary.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **300**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 34000**

**For Further Information Contact**

Purchasing Management
Association of Canada
Atlantic District
525 Duke Street, Suite 505
Halifax, N.S.
B3J 3A5

# T06 HOTEL, MOTEL AND SERVICES MANAGEMENT OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 6131 | Managers: Hotel, Motel and Other Accommodation |
| 1142 | Services Management occupations |

**Principal Duties** This occupational group is concerned with performing administrative and managerial activities such as planning, organizing, directing and controlling in organizations which provide protective services, lodging and other accommodation, food and beverage, apparel and furnishing, building and cleaning, and other services.

**Requirements** While there are no formal entrance requirements into these occupations, most managers obtain their positions by starting at a lower, entry level position, later moving into supervisory positions, and eventually becoming a manager through this process of increased training and education.

**Training Paths** A four-year program entitled Tourism and Hospitality Management is offered at Mount Saint Vincent University in Halifax and a two-year program entitled Hospitality Administration is available at the University College of Cape Breton in Sydney. Completion of the twelfth grade or its equivalent is normally required for entry into these programs. Also, a two-year program entitled Hotel-Motel-Restaurant Management is offered at the Dartmouth Regional Vocational School, the pre-requisite being the eleventh grade or its equivalent.

**Skills/Aptitudes** The efficient operation of a hotel requires a wide range of abilities. A hotel manager must have an aptitude for business matters. Public relations and communications skills are very important. Problem solving and decision-making abilities are essential. A hotel manager must be tactful and patient when dealing with a variety of personalities.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1110**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

# T07 PRODUCTION MANAGEMENT OCCUPATIONS

**Principal Duties** This occupational group is concerned with managerial and administrative work such as directing and co-ordinating production departments, divisions, or other organizational units through subordinate managers and supervisors, in an industrial, commercial, government, or other organization.

**Requirements** While there are no formal requirements to work in this occupation, a degree in industrial engineering and/or a Master's degree in Business Administration are a definite asset and may be required by certain employers.

**Training Paths** Some combination of work experience and formal education in either a food or industrial setting would provide the appropriate background in order to move into a management position. Alternatively, a Bachelors degree in industrial engineering offered at the Technical University of Nova Scotia in Halifax plus related work experience could also lead to a management position. The third alternative is to complete a Masters degree in Business Administration at Dalhousie University or Saint Mary's University, both in Halifax. The engineering degree is a five year program requiring grade twelve or its equivalent with a concentration in math and the sciences. The Master's program in Business requires the completion of an undergraduate degree in any field.

**Skills/Aptitudes** Individuals in these occupations should be able to get along well with people on all levels, possess strong leadership abilities, and be able to make decisions. Good organizational abilities and a planned approach to projects is essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **1180**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **70**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 38000**

# T08 MANAGEMENT OCCUPATIONS, CONSTRUCTION

**Principal Duties** This occupational group is concerned with activities in management and administration in organizations which are involved in construction, alteration, or repair of buildings and public structures such as highways, railways, bridges, airports and docks. Activities may include preparing estimates, placing material orders, hiring of contracting workers and/or machines, and ensuring all specifications are met.

**Requirements** There are no formal educational requirements for entry into this occupation.

**Training Paths** The majority of individuals in this occupation receive their training on-the-job. Three to five years of construction experience is generally required to move into a management position in this industry. In addition, a two-year course in construction administration is offered at the Nova Scotia Institute of Technology in Halifax. The entrance requirement is completion of the twelfth grade or its equivalent with courses in mathematics, physics, and chemistry.

**Skills/Aptitudes** Individuals entering these occupations should possess good interpersonal skills as well as effective verbal and written communication skills. Leadership qualities, the ability to motivate individuals, and good organizational skills are essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **650**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 36000**

**For Further Information Contact**

Construction Association of Nova Scotia
P.O. Box 1476, North
Halifax, N.S.
B3H 5H7

# T11 MEDICAL AND HEALTH ADMINISTRATORS

**Principal Duties** This occupational group is concerned with performing managerial and administrative duties in health agencies and similar establishments such as hospitals, medical clinics and health support services.

**Requirements** Entrance to these occupations usually requires a Master's degree and/or many years of experience in either the medical field or in junior administrative positions.

**Training Paths** Formal training in these occupations is available at Dalhousie University in Halifax. A two-year Health Services Administration degree is offered at the Master's level. Entrance to this program requires completion of a Bachelor's degree and good standing on the Graduate Management Admissions Test. Alternatively, a Bachelor's degree plus several years experience in a junior administrative or an assistant administrative position could also lead into these occupations.

**Skills/Aptitudes** Medical and hospital administrators need good managerial skills including the ability to organize, negotiate, motivate, and communicate. They must be able to work well under pressure and make difficult decisions quickly.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **390**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# T12 OFFICERS AND MANAGERS, FINANCIAL

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 1171 | Accounting, auditors and other financial officers |
| 1135 | Financial management occupations |

**Principal Duties** This occupational group is concerned with performing managerial and administrative duties in banks, credit agencies, investment companies, or similar financial institutions and in departments within industrial, commercial, or government organizations. Activities may include advising decision-makers on credit and investment policies, and negotiating with financial or other institutions on matters pertaining to the general policy of the organization.

**Requirements** Entrance into these occupations generally requires a Bachelor's Degree in Commerce or Business Administration with a concentration in accounting or finance. For senior management positions, a Master's of Business Administration degree is recommended. These senior positions are usually made available to individuals with a considerable amount of experience and/or seniority in the company.

**Training Paths** Bachelor degrees in Commerce or Business Administration may be obtained at most universities throughout Nova Scotia. Programs are three or four years in length. A Master's of Business Administration degree may be obtained through a two-year program offered at both Dalhousie and Saint Mary's University in Halifax. Entrance to these programs is based upon the completion of an undergraduate degree and on the marks obtained in the Graduate Management Admissions Test.

**Skills/Aptitudes** Individuals should possess good analytical abilities and excellent communication skills, both verbal and written. A good mathematical ability is also an asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **6200**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **380**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 36000**

# T13 BUYERS AND PURCHASERS, WHOLESALE AND RETAIL TRADE

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 1175 | Purchasing officers |
| 5191 | Buyers-wholesale and retail trade |

**Principal Duties** This occupational group is concerned with purchasing goods, materials, or business services for internal use, further processing or for resale in wholesale or retail trade. Activities may include establishing requirements for the organization, interviewing suppliers, negotiating prices, arranging for delivery, consenting to payments of invoices or return of damaged or unsatisfactory merchandise, and performing other functions directly related to purchasing.

**Requirements** While there are no formal educational requirements for entry into these occupations, employers generally require several years of experience in a purchasing department. Some employers require a university education.

**Training Paths** Training for these occupations is usually obtained through three to five years of on-the-job experience in a related junior or clerical position. Post-secondary correspondence courses may also be taken through the Professional Purchaser Diploma Program offered by the Purchasing Management Association of Canada. These courses require successful completion of the twelfth grade or its equivalent and are taken on a part-time basis and completed within eight years. To obtain a general business background, a Bachelor's degree in Commerce or Business Administration can be obtained at most universities throughout the Province. These programs are generally four years in length and require completion of the twelfth grade or its equivalent for entry. Individual training in the specific products being purchased is a definite asset.

**Skills/Aptitudes** Individuals in these occupations require leadership, organizational and communication skills. Buyers must be willing to accept new ideas, take risks, make careful decisions and be knowledgeable about their product or service and the market for which they are doing the buying.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated Employment in 1987: **260**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Purchasing Management Association of Canada
Atlantic District
525 Duke Street, Suite 505
Halifax, N.S.
B3J 3A5

# U01 PHYSICIANS AND SURGEONS

**Principal Duties** This occupational group is concerned with preventing, diagnosing and treating human illnesses. Activities may include administering medical examinations; prescribing and providing treatment for diseases, disorders and injuries; performing surgical operations in the treatment of injuries, diseases, and disorders of the human body; and performing related tasks.

**Requirements** Individuals working in these occupations are required to possess a license from the Provincial Medical Board of Nova Scotia.

**Training Paths** The Dalhousie University Medical School offers the only four-year program leading to a Doctor of Medicine degree in Nova Scotia. After passing the Medical Council of Canada qualifying exam, an internship of one year is required before a license to practice medicine is granted. Post-graduate training of two to eight years is available for those wanting to specialize. Generally, individuals will have completed a science degree and have written the Medical College Admission Test before being admitted into the medicine program.

**Skills/Aptitudes** Individuals in these occupations should possess warmth, sympathy, and have an interest in people as well as a strong grasp of scientific principles and their application to medical problems. Physicians have to take final responsibility for their decisions and the consequences they have on patient's lives. Good communication skills are important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1750**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **80**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 95000**

**For Further Information Contact**

Faculty of Medicine
Sir Charles Tupper Bldg.,
15th Floor,
College Street
Halifax, N.S.
B3H 4H7

# U02 DENTISTS

**Principal Duties** This occupational group is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums, teeth and related structures. Activities may include diagnosing and correcting abnormalities in growth development and positioning of teeth and other dental-facial structures, or replacing missing teeth and correcting irregularities of mouth and jaw to improve speech, eating and appearance.

**Requirements** Individuals working in this occupation are required to possess a license from the Provincial Dental Board of Nova Scotia.

**Training Paths** The Dalhousie University Dental School offers a four-year program leading to qualification as a Doctor of Dental Surgery. Following graduation, the option to undertake post-graduate work is available to those wishing to specialize. The entrance requirements include at least two years of university undergraduate work in the sciences, although a Bachelor's degree is preferred, a personal interview, and an acceptable score on the National Dental Aptitude Test.

**Skills/Aptitudes** Individuals in this occupation should have good manual dexterity, an aptitude for precise and accurate work, and a reassuring manner in order to assist people in feeling relaxed.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **590**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 55000**

**For Further Information Contact**

N.S. Dental Association
5991 Spring Garden Rd., Ste.604
Halifax, Nova Scotia
B3H 1Y6

# U03 OSTEOPATHS AND CHIROPRACTORS

**Principal Duties** This occupational group is concerned with diagnosing and treating disorders of the human body, mainly by manipulative methods. Chiropractors utilize manual manipulation of the spine and extremities, exercise, nutrition and physiological therapeutics in patient care. Osteopaths are more similar to medical doctors than chiropractors in that osteopaths are able to utilize all other known diagnostic and therapeutic techniques including drugs and operative surgery in addition to manipulative therapy.

**Requirements** Individuals in these occupations are required to be certified by the appropriate association, either the Canadian Osteopathic Association or the Nova Scotia Chiropractic Association.

**Training Paths** While there is no training available for chiropractors in Nova Scotia, the Canadian Memorial Chiropractic College in Toronto offers a four-year program leading to a medical degree. Two years of undergraduate study in biology, chemistry, physics and psychology is the minimum requirement for admission. The college also offers graduate residency programs.

There is currently no training available for osteopathic physicians in Canada, however, there are fifteen colleges of osteopathic medicine in the United States. Admission is usually based on the successful completion of a four-year undergraduate degree in science and on the test score obtained on the Medical College Admission Test. These four-year programs in osteopathy can be followed up with post-graduate studies if desired.

**Skills/Aptitudes** An interest in the biological sciences, especially anatomy and physiology, and a genuine interest in the well-being of others are important. Good control of hands and fingers is necessary, as is an interest in working with others.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **30**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Nova Scotia Chiropractic Association
517 Main Street
Kentville, Nova Scotia
B4N 1L2

or

Canadian Osteopathic Association
575 Waterloo St.,
London, Ontario
N6B 2R2

# U04 OPTOMETRISTS

**Principal Duties** This occupational group is concerned with performing vision examinations and additional tests to determine the presence of visual, muscular or neurological abnormalities and eye disease. Activities include prescribing lenses, optical aids, or therapy to enable maximum vision.

**Requirements** Individuals working in this occupation must be licensed as a Doctor of Optometry with the Nova Scotia Association of Optometrists.

**Training Paths** Training for optometrists is not available in Nova Scotia. A four-year program does exist, however, at the University of Waterloo in Waterloo, Ontario. The minimum entrance requirement is the completion of the twelfth grade or its equivalent and at least two years of university education in the field of science, which can be completed at most universities in Nova Scotia, but preferably at the University of Waterloo itself. As enrollment of Nova Scotia students is very limited, high marks in all subject areas are strongly recommended. Another course in optometry is available at the Universite de Montreal in Montreal, Quebec but this is for French-speaking students only.

**Skills/Aptitudes** Individuals working in this occupation require good eye-hand coordination, an aptitude for precision work, and a pleasant personality when working with patients.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **60**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

N.S. Association of Optometrists
P.O. Box 3393 South
Halifax, Nova Scotia
B3J 3J1

# U06 PHARMACISTS

**Principal Duties** This occupational group is concerned with compounding and dispensing pharmaceuticals in hospitals, industry and retail outlets. Activities include filling prescriptions, developing new medicinal substances, and analyzing, testing and distributing drugs and related supplies.

**Requirements** Individuals working in this occupation are required to possess a license from the Provincial Pharmacy Board of Nova Scotia.

**Training Paths** Training in this field is offered at Dalhousie University through a four-year Bachelor of Science degree program in pharmacy. The minimum entrance requirement is completion of the twelfth grade or its equivalent with an acceptable score on the Pharmacy College Admission Test.

**Skills/Aptitudes** Individuals entering this occupation should have an interest in chemistry, keep abreast of new advances in the field of drug research, enjoy performing detailed work and have good oral communication skills.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **690**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **40**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 33000**

**For Further Information Contact**

Pharmacy Association of Nova Scotia
P.O. Box 3214 South
Halifax, Nova Scotia
B3J 3H5

# U07 DIETICIANS AND NUTRITIONISTS

**Principal Duties** This occupational group is concerned with the application of the principles of nutrition to plan and supervise the preparation and serving of meals. Activities may include planning menus and diets for special nutritional requirements, participating in research, offering consultive services, advising individuals and lecturing to groups on nutrition.

**Requirements** Individuals working in these occupations are required to be licensed with the Nova Scotia Dietetic Association.

**Training Paths** Training in these fields can be obtained through a Bachelor's degree in either dietetics, nutrition, food service administration, or home economics (with a major in foods and nutrition). The relevant institutions are Acadia University, Wolfville; Mount Saint Vincent University, Halifax; and St. Francis Xavier University, Antigonish. Following the completion of the Bachelor's degree, the individual must fulfill a one-year internship at an approved institution. The minimum entrance requirement is completion of the twelfth grade or its equivalent.

**Skills/Aptitudes** Individuals entering these occupations should have a genuine interest in people and possess abilities in leadership, creativity, initiative and sound judgement.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **190**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

**For Further Information Contact**

Nova Scotia Dietetic Association
P.O. Box 8841, Station A
Halifax, Nova Scotia
B3K 5M5

# U08 REGISTERED NURSING OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3131 | Nurses, Except Supervisors |
| 3130 | Supervisors Nursing Occupations |

**Principal Duties** This occupational group is concerned with providing nursing care to the sick, injured and the infirm; providing nursing advice and health counselling; assisting physicians; and performing other nursing activities in establishments such as hospitals, clinics, schools, industrial plants, nursing homes, and private homes. Responsibilities may include supervising and coordinating the activities of personnel engaged in nursing and related tasks.

**Requirements** Individuals working in these occupations are required to be registered with the Registered Nurses Association of Nova Scotia. Supervisory positions require a Bachelor of Nursing degree while staff positions only require a diploma in nursing.

**Training Paths** The four-year Bachelor's degree program is offered at Dalhousie University, Halifax and at St. Francis Xavier University, Antigonish. The two-year non-degree program is available at one of seven schools of nursing in the Province. The entrance requirement for both types of programs is completion of the twelfth grade or its equivalent with good standing in mathematics, chemistry and biology.

**Skills/Aptitudes** Individuals entering into these occupations should have excellent communication and interpersonal skills, good physical endurance, emotional stability and a desire to respond to the emotional and physical needs of people.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **5900**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **520**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Registered Nurses' Association of Nova Scotia
6035 Coburg Road
Halifax, Nova Scotia
B3H 1Y8

# U10 HEALTH DIAGNOSING AND TREATING OCCUPATIONS, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group includes three occupations, not elsewhere classified, concerned with health diagnosis and treatments. Chiropodists are mainly concerned with easing pain in the feet rather than correcting disorders. Podiatrists are involved in some of these same activities and in addition, are able to take X-rays, prescribe drugs, administer local anesthetics and perform foot surgery. Naturopaths treat body disorders by a system based on natural laws governing the body and rely on diet and exercise as main therapy techniques.

**Requirements** Chiropodists must complete a three-year course in chiropody while podiatrists are required to have a degree in Podiatric Medicine and be registered with the Canadian Podiatry Association. Podiatrists are only permitted to work in Ontario, Alberta and British Columbia. There are no licensed podiatrists in Nova Scotia.

**Training Paths** The only training that is available for chiropody is in Great Britain. This three-year program requires the completion of grade twelve for admission. Podiatrists can only receive training in the United States through a four-year degree program. At least two years of an undergraduate degree is required for admission into this specialized program.

**Skills/Aptitudes** Individuals in these occupations should have an interest in science and medicine. Good manual dexterity and a desire to help people are also necessary. Personal qualities which include confidence, patience and good communication skills as well as a good business sense are all recommended.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **100**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Canadian Podiatry Association
447 Sussex Drive
Ottawa, Ontario
K1N 6Z4

# U11 PHYSIO- AND OCCUPATIONAL THERAPISTS

**Principal Duties** This occupational group is concerned with providing therapeutic treatment to physically and mentally handicapped, impaired or disabled persons using physical, psychological and mechanical means. Activities may involve the use of heat, water, light, sound, exercise, and massage in the case of physiotherapy or the use of activities such as work, education, and recreation in the case of occupational therapy.

**Requirements** Individuals working in these occupations are required to possess a Bachelor's degree in either physiotherapy or occupational therapy.

**Training Paths** Training is provided at Dalhousie University in Halifax through a four-year Honours Bachelor of Science degree program in either physio- or occupational therapy. The entrance requirement is completion of the twelfth grade or its equivalent plus one year of university study, usually in the area of science with a strong academic standing in all subjects.

**Skills/Aptitudes** Individuals entering these fields should possess good interpersonal skills, personal warmth, sensitivity and creativity. A strong sense of responsibility and the ability to motivate patients is also important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **460**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Nova Scotia Society of Occupational Therapists
P.O. Box 3381, South
Halifax, Nova Scotia
B3J 3J1

or

Nova Scotia College of Physiotherapists
P.O. Box 3424, South
Halifax, Nova Scotia
B3J 3J1

# U12 MEDICAL LABORATORY TECHNICIANS AND TECHNOLOGISTS

**Principal Duties** This occupational group is concerned with performing technological and technical analyses on patient samples within a medical specialization, such as haematology, histology, clinical chemistry or microbiology, to obtain data for use in the diagnosis, treatment and control of disease.

**Requirements** Individuals working in these occupations are required to be certified by either the Canadian Society of Laboratory Technicians or the Canadian Society of Laboratory Technologists (C.S.L.T.). To obtain certification, individuals must successfully complete the C.S.L.T. national examinations.

**Training Paths** Training in the field of Medical Laboratory Technology can be obtained through a two-year diploma program offered at the Nova Scotia Institute of Technology in Halifax. Training as a Medical Laboratory Technician is available in the area of cytology (the study of cell samples) through a two-year program offered at the Victoria General Hospital in Halifax. The entrance requirement to each of these programs is successful completion of the twelfth grade or its equivalent with good standing in mathematics, biology and chemistry.

**Skills/Aptitudes** Individuals entering these occupations should have a concern for others and a tendency toward precision and accuracy with close attention to detail. Good communication skills, manual dexterity, and an ability to work cooperatively are important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1100**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **70**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 25000**

**For Further Information Contact**

Nova Scotia Society of Medical
Laboratory Technologists
P.O. Box 3102, South
Halifax, Nova Scotia
B3J 3J6

# U13 DENTAL RELATED OCCUPATIONS

**Principal Duties** This occupational group is concerned with supportive work in the field of dentistry and includes: dental hygienists who perform the cleaning of patients' teeth; dental assistants who assist dentists in the care and treatment of patients during dental procedures; dental technicians who work in laboratory setting and are involved in making, altering and repairing dental devices and dentures; and denturists, who make wax moulds in order to form and fit dentures for patients.

**Requirements** Individuals working in these occupations are required to be licensed by the Provincial Dental Board of Nova Scotia.

**Training Paths** Training in the area of Dental Hygiene is provided through a two-year diploma program offered at Dalhousie University in Halifax. This program requires the completion of one year of university for entrance. Training for Denturists is available at the Dartmouth Regional Vocational School through a two-year denture technology program. The Nova Scotia Institute of Technology in Halifax offers a one-year course for dental assistants and a two-year course in dental technology. The minimum entrance requirement for each of these programs is the completion of the twelfth grade or its equivalent with a solid academic background in mathematics, english, and the sciences.

**Skills/Aptitudes** Individuals entering these fields should possess good interpersonal skills and a desire to help people. Patience and good judgement are also useful in this line of work. The ability to use hands and fingers for precise, accurate work is required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1360**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **160**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Denturist Society of Nova Scotia
Lloy's Denture Clinic
2 Commercial Street
Glace Bay, N.S.
B1A 3C1

or

Nova Scotia Dental Assistants Assoc.
P.O. Box 9142
Station A, Halifax, Nova Scotia
B3K 5M8

or

Nova Scotia Dental Technicians Assoc.
P.O. Box 623
Halifax, Nova Scotia
B3G 2R7

# U14 RADIOLOGICAL TECHNOLOGISTS AND TECHNICIANS

**Principal Duties** This occupational group is concerned with the installation, operation, and maintenance of x-ray equipment used in diagnostic and therapeutic applications. Duties may include applying radioactive substances to patients for diagnostic and therapeutic purposes under the supervision of a physician.

**Requirements** Individuals working in these occupations are required to be registered with the Canadian Association of Medical Radiation Technologists.

**Training Paths** Training in this field can be obtained through one of three programs: Radiography Technician, a two-year course offered at the Halifax Infirmary Hospital and the Victoria General Hospital; Radiation Therapy, a two-year program offered at the Cancer Treatment and Research Foundation in Halifax; and Nuclear Medicine Technology, a two-year program offered at the Nova Scotia Institute of Technology in Halifax in conjunction with the above mentioned hospitals. The minimum entrance requirement is completion of the twelfth grade or its equivalent with an emphasis in math, physics and biology.

**Skills/Aptitudes** Individuals entering into these occupations should be able to handle stressful working conditions, possess a strong sense of responsibility, exercise patience and courtesy with patients, and be willing to keep abreast of new advances in the field.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **300**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 26000**

**For Further Information Contact**

Nova Scotia Society of Medical Radiation Technologists
Comp. 19 Fenerty Road
RR #2 Lower Sackville, Nova Scotia
B4C 2S7

# U16 DISPENSING OPTICIANS

**Principal Duties** This occupational group is concerned with arranging for the production of eyeglasses or contact lenses, assisting customers when choosing frames, fitting customers with prescription eyeglasses or contact lenses as well as instructing on procedures for inserting, removing, and cleaning contact lenses. Activities may include arranging for grinding and polishing of lenses.

**Requirements** Dispensing opticians must hold a current Certificate of Registration issued by the Provincial Board of Ophthalmic Dispensers. To qualify, the individual must be twenty-one years of age, provide proof of adequate training and experience, pass a qualifying examination and pay the prescribed fee.

**Training Paths** Training for this occupation can be obtained in either one of two ways: completion of an ophthalmic dispensing course plus one year of work experience or three years of on-the-job training under the supervision of a qualified optician plus completion of a home-study course. The ophthalmic dispensing program is available only at the Georgian College of Applied Arts and Technology in Barrie, Ontario. This is a two-year course and requires completion of the twelfth grade or its equivalent for entry. On-the-job training requires up to three years of training and related experience under the supervision of a qualified worker.

**Skills/Aptitudes** The work of a Dispensing Optician demands accuracy and close attention to detail. Individuals in this occupation should enjoy working with people and should be patient, approachable and reassuring.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **170**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Nova Scotia Society of Dispensing Opticians
c/o Halifax Optical
Suite 109,
5880 Spring Garden Road,
Halifax, Nova Scotia
B3H 1V2

# U20 NURSING ASSISTANTS AND RELATED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3134 | Registered Nursing Assistant |
| 3139 | Nursing, Therapy and Related Assisting Occupations, N.E.C. |

**Principal Duties** This occupational group is concerned with giving routine nursing care to patients. Activities include taking and recording temperature, pulse, blood pressure, and respiration; giving baths and shaving patients; and serving and feeding patients. Responsibilities may include providing recreational and therapy programs, providing supportive services in diagnostic and therapeutic procedures, and assisting as a member of an ambulance team.

**Requirements** Individuals working in these occupations are required to be registered with and certified by the Board of Registration of Nursing Assistants, Nova Scotia Department of Health.

**Training Paths** Training for these occupations is available through all of the Province's regional vocational schools. These are one-year programs requiring the completion of the tenth grade or its equivalent for admission.

**Skills/Aptitudes** Individuals entering these occupations should enjoy caring for people of all ages in addition to having good communication and interpersonal skills. The ability to follow instructions and a willingness to work under close supervision is also necessary.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **2480**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **430**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 18000**

**For Further Information Contact**

Nova Scotia Certified Nursing Assistant Association
Sunnyside Place, Suite 212
1600 Bedford Highway
Halifax, Nova Scotia
B4A 1E8

# U22 MEDICAL/HEALTH OCCUPATIONS, NOT ELSEWHERE CLASSIFIED

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 3133 | Nurses in Training |
| 3159 | Other Occupations in Medicine and Health, N.E.C. |

**Principal Duties** This occupational group includes occupations, not elsewhere classified, concerned with activities in medicine and health. Activities may include designing, constructing, assembling and fitting prosthetic devices; operating inhalation therapy equipment, and other hospital equipment; and assisting professional staff in clinics, pharmacies, morgues and animal hospitals; sterilizing and packaging hospital supplies; and assisting in preparation of special diet menus.

**Requirements** Due to the wide variety of occupations in this group, which include prosthetists, orthotists, EEG and EEC technicians, infection control officers, morgue attendants, and central-supply aides, other informational sources should be consulted in order to determine specific entrance requirements.

**Training Paths** For many of these occupations, on-the-job training in a hospital or clinic is the only means of gaining experience. Some jobs do, however, require formal training at a recognized school. Once again, other sources of information should be looked at in order to determine precise educational and training needs of the specific occupation.

**Skills/Aptitudes** Individuals in these occupations usually have an interest in medicine and health. The ability to deal with people in a mature, professional manner is required. Individuals should also be able to cope with the pressures of working in a hospital environment.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1010**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **70**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Canadian Health Education Society
P.O. Box 2305, Stn. D
Ottawa, Ont.
K1P 5K0

# V01 CHEMISTS

**Principal Duties** This occupational group is concerned with conducting primary research to broaden the knowledge of the science of chemistry, and with conducting applied research to produce new or improved materials, compounds and substances for commercial purposes. Activities include developing analytical methodology and techniques, and performing quantitative and qualitative analyses and experiments in organic, inorganic and physical chemistry.

**Requirements** Most positions require a Master's or Doctorate degree in a specialized field of chemistry.

**Training Paths** Most universities offer three and four-year Bachelor of Science degree programs in chemistry. The basic entrance requirement is successful completion of the twelfth grade or its equivalent with high standing in mathematics and chemistry. Master's degrees in Chemistry are offered at Dalhousie University in Halifax and at Saint Francis Xavier University in Antigonish.

**Skills/Aptitudes** Chemists should be comfortable working with delicate instruments. They must be able to combine the precision needed in mathematics with the experimentation required in this and other sciences. Basic computer skills are also an asset.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **210**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# V02 GEOLOGISTS

**Principal Duties** This occupational group is concerned with conducting research into the nature and history of the earth's crust; the physical nature of the atmosphere and hydrosphere; and the distribution, circulation and properties of water. Activities may include geological mapping; identifying and classifying fossils and precious stones; laboratory research; and providing assistance in locating and developing oil, natural gas and mineral deposits. Geologists work on rocks from land, the ocean floor and from space.

**Requirements** The minimum educational level to work in this occupation is generally a Bachelor's degree in geology. Some jobs with exploration companies or in research institutes or universities may require a Master's or Ph.D. degree.

**Training Paths** Five universities in Nova Scotia offer programs in geology ranging in length from three to five years. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong background in mathematics and science.

**Skills/Aptitudes** Individuals in this occupation should have an interest in the earth's structure and materials and enjoy working outdoors, often in remote areas. A willingness to travel may also be necessary, although some geologists work entirely in a laboratory environment.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **280**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Manager, Information Services
Department of Mines and Energy
P.O. Box 1087
Halifax, N.S.
B3J 2X1

# V03 PHYSICISTS

**Principal Duties** This occupational group is concerned with conducting theoretical, experimental, and applied research related to the scientific and commercial utilization of heat, light, acoustics, electricity, magnetism, and other physical phenomena. Activities may include conducting experiments; analyzing results; producing research data to formulate or substantiate new theories, concepts or laws; and observing forms of energy and their interaction and effect on matter.

**Requirements** Most positions require a Master's or Doctorate degree in a specialized field of physics.

**Training Paths** A Bachelor of Science degree in Physics is at least four years in length and is offered at most universities in Nova Scotia. The basic entrance requirement is completion of the twelfth grade or its equivalent with good standing in mathematics and physics. Senior research or teaching positions in physics require a Master's or Doctorate degree. Many universities offer these science programs, which may take one to five years to complete.

**Skills/Aptitudes** Physicists should have perseverance and initiative, along with a keen mind and a sense of curiosity. An analytical ability, along with a desire to conduct research into areas of physics, are important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **50**
- Employment growth between 1987 and 1995 is projected to be: **N/A**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Mona L. Jento, Executive Secretary
Canadian Association of Physicists
151 Salter Street #805
Ottawa, Ontario
K1P 5H3

# V04 METEOROLOGISTS

**Principal Duties** This occupational group is concerned with conducting pure research into atmospheric phenomena and applied research to develop theories, laws, methodology and techniques for more accurate weather analysis and forecasting; and studying and reporting on climatic conditions.

**Requirements** A Bachelor's degree and a diploma in meteorology is generally required for employment in this occupation.

**Training Paths** Dalhousie University in Halifax offers a one-year diploma program in meteorology for students who have completed a three or four-year Bachelor of Science in Physics. Those who find employment with the federal government must successfully complete a six-month training program to develop their operational meterological skills.

Individuals who wish to do research or work in management positions should have at least a Master's degree in meteorology.

**Skills/Aptitudes** The work of meteorologists is exacting, and often demands close concentration for long periods of time. Meteorologists should have good judgement, initiative and perseverance. They must be able to meet deadlines, and be able to speak and write effectively in order to supply information to users.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **70**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

# V05 AGROLOGISTS

**Principle Duties** This occupational group is concerned with conducting research, advising farmers, or teaching on-farm practices. Agrologists may also be involved in product testing, analysis of farm inputs, appraisals, and financial, engineering, inspection and information services.

**Requirements** Individuals working in this occupation must possess a Bachelor degree in this field and be registered with the Nova Scotia Institute of Agrologists. Many possess Master's or Ph.D. degrees as well.

**Training Paths** The Nova Scotia Agricultural College in Truro offers the only four-year Bachelor of Science degree in Agriculture in the Atlantic provinces. Completion of the twelfth grade or its equivalent with courses in science and mathematics is required for entry into this program.

**Skills/Aptitudes** Agriculturalists may work independently, but are more likely to be part of a team. The ability to communicate well, both orally and in writing, is important. A farming background is helpful but not essential.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **220**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 37000**

**For Further Information Contact**

Nova Scotia Agricultural College
P.O. Box 550
Truro, Nova Scotia
B2N 5E3

# V06 BIOLOGISTS AND RELATED SCIENTISTS

**Principal Duties** This occupational group is concerned with conducting basic and applied research into all forms of living organisms and vital processes, and their relationship to each other and to their environment. Activities include studying origin, development, growth, reproduction, structure, function, distribution and other life phenomena of a single species or community of species. This group includes scientists from many fields, such as biology, medicine, botany, and zoology.

**Requirements** Individuals in this occupation are generally required to hold a Masters or Ph.D. degree in Biology or in a related field.

**Training Paths** In order to enter a Masters or Doctorate program, the individual must first complete a Bachelor of Science degree. This three-year degree is offered at most universities throughout the Province and requires the completion of the twelfth grade or its equivalent with an emphasis in mathematics and the sciences for admission. A two-year Masters of Science degree in biology or other related areas may be completed at Acadia University in Wolfville or at Dalhousie University in Halifax. A Ph.D. degree is only available at Dalhousie University and requires at least two years to complete. Both the Masters and Ph.D. programs require the completion of an undergraduate degree in biology or a related field for entry. Post-Doctorate training programs in clinical chemistry are available at Dalhousie University.

**Skills/Aptitudes** Individuals interested in these occupations should be comfortable working with instrumentation, chemicals and biochemicals, have effective communication skills, and be able to demonstrate judgement in terms of scientific and administrative decision-making. Basic computer and mathematics skills are also assets.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **390**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 41000**

# V07 ARCHITECT

**Principal Duties** This occupational group is concerned with the design and construction of buildings and related structures and the aesthetic landscaping of parks, road development and other projects. Activities may include designing; building; developing plans, specifications, and detailed drawings; arranging contracts and exercising general supervision over construction.

**Requirements** Individuals in this occupation must be registered with the Nova Scotia Association of Architects in order to practice.

**Training Paths** The Technical University of Nova Scotia in Halifax offers a three-year Bachelor of Environmental Design Studies (BEDS) degree. Admission requirements include the completion of at least two years of university study in any recognized program which also implies completion of the twelfth grade. A Master of Architecture degree is also offered at this university. This is a two-year degree which requires the completion of the BEDS program for admission. An alternate method of training requires a person to spend at least 10 years in continuous employment with architects. The potential architect must complete several correspondence courses in addition to working on-the-job. This method of preparation is not common in Nova Scotia, but is practiced in areas where access to architectural schools is limited.

**Skills/Aptitudes** Individuals entering this occupation should be interested in art and design and enjoy detailed, precise work. The ability to visualize in three dimensions and draw accurately is important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **200**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Nova Scotia Association of Architects
1361 Barrington Street
Halifax, Nova Scotia
B3J 1Y9

# V08 CHEMICAL ENGINEERS

**Principal Duties** This occupational group is concerned with the research, design and development of manufacturing processes in which chemical changes occur; and the supervision of the construction, operation and maintenance of chemical plant equipment.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the engineering diploma program at one of several universities throughout the Province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** An interest in mathematics, physics, chemistry, and computers at the high school level is important. Individuals entering this occupation should possess an interest in the uses and application of chemicals in process industries such as petrochemicals and pulp and paper. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **80**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V09 CIVIL ENGINEERS

**Principal Duties** This occupational group is concerned with planning, designing and supervising the construction and maintenance of buildings, bridges, dams, tunnels, ports, docks, and other structures, water supply and sewage system, transportation, and other facilities for public, industrial or commercial use.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the engineering diploma program at one of several universities throughout the Province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** Individuals entering this occupation should possess an interest in the planning and designing of buildings, bridges and dams. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **900**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **50**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 45000**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, N.S.
B3J 2M4

# V10 ELECTRICAL ENGINEERS

**Principal Duties** This occupational group is concerned with the design, construction, maintenance and repair of systems which generate, transmit, distribute, control and utilize electric energy; research into electrical engineering problems and development of electrical and electronic products; and provision of technical direction in the manufacture of a wide variety of electrical and electronic equipment.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the diploma program at one of several universities throughout the province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry.

**Skills/Aptitudes** An interest in math, physics, chemistry, and computers at the high school level is important. Individuals entering this occupation should possess an interest in the design and operation of electrical systems and equipment relating to computers, communications, telecommunications, electronics and power systems. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **840**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **50**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 40000**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V11 INDUSTRIAL ENGINEERS

**Principal Duties** This occupational group is concerned with the design, initiation, and development of production procedures to manufacture units of specified quality in large quantities, while maintaining low production overhead and safe and efficient operations.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the engineering diploma program at one of several universities throughout the Province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** Individuals entering this occupation should possess an interest in the organization and management of the workplace including plant layout, production, and work scheduling; and with the integration of automation into the workplace. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **410**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 37000**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V13 MECHANICAL ENGINEERS

**Principal Duties** This occupational group is concerned with applied research, development and design of mechanical equipment and its manufacture; supervision of the operation, maintenance or repair of machines that produce, transmit or consume power or energy; and evaluation of installed plant processes related to machines.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the engineering diploma program at one of several universities throughout the Province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** Individuals entering this occupation should possess an interest in the design and operation of machines and mechanical processes including transportation, equipment, robotics and manufacturing. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **280**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 39000**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V14 METALLURGICAL ENGINEERS

**Principal Duties** This occupational group is concerned with studying the properties and characteristics of metals; developing, controlling and advising on processes for the extraction of metals from their ores; developing alloys; and overseeing metal manufacturing processes.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the engineering diploma program at one of several universities throughout the Province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** Individuals entering this occupation should possess an interest in the chemical and physical processes involved in metal purification and the extraction of metals from the ground. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **20**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V15 MINING ENGINEERS

**Principal Duties** This occupational group is concerned with conducting studies on mining engineering problems; determining mine location; planning and designing the development of the mines, mine facilities, systems and equipment; advising on methods of extracting coal, minerals and metal-bearing ores from the earth; planning; organizing; and supervising the extraction of minerals and their preparation or processing.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The engineering degree can only be obtained in Nova Scotia through the five-year Bachelor of Engineering program at the Technical University of Nova Scotia in Halifax. The first two years of this program must be completed through the engineering diploma program at one of several universities throughout the Province. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics, and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** Individuals entering this occupation should possess an interest in the evaluation, development, and extraction of mineral deposits including mining methods, mineral processing techniques, rock mechanics, and environmental control methods. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **50**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V16 PETROLEUM ENGINEERS

**Principal Duties** This occupational group is concerned with studying geological surveys, earth samples and other data to advise on both the means of developing oil and gas fields and the equipment to be used in the extraction, storage and initial treatment prior to transportation.

**Requirements** Individuals working in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. The only training in Canada for Petroleum Engineers is offered at the University of Alberta in Edmonton. This degree program is four years in length. The minimum entrance requirement is completion of the twelfth grade or its equivalent with a strong standing in mathematics, physics and chemistry. A knowledge of computers is an asset.

**Skills/Aptitudes** The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **20**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V17 AEROSPACE ENGINEERS

**Principal Duties** This occupational group is concerned with the research, design, development, manufacture, and maintenance of aerospace vehicles and equipment. Duties may include aerodynamic design, flight testing, and structural and thermodynamic testing.

**Requirements** Individuals in this occupation are required to be registered with the Association of Professional Engineers.

**Training Paths** The educational requirements to obtain registration include the completion of a Bachelor of Engineering degree program and a two-year work term. Training for this occupation is not available in Nova Scotia, however, there is a program at the University of Toronto in Ontario. The minimum entrance requirement is completion of Ontario grade thirteen with a strong standing in mathematics, physics, and chemistry. Completion of at least one year of university before making application is recommended.

**Skills/Aptitudes** Individuals entering into this occupation should possess an interest in engineering design, problem solving, and technology. The ability to think in an analytical and logical manner and to communicate and collaborate well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **80**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V20 PROFESSIONAL ENGINEERS, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group is concerned with occupations, not elsewhere classified, involved with the practical application of the laws and principles of architecture and engineering for the design, development, installation, production, utilization and maintenance of machines, materials, instruments, structures, processes and services.

**Requirements** Individuals in these occupations are generally required to have an engineering degree and be registered with the Association of Professional Engineers.

**Training Paths** There are a number of occupations within this group, some of which include marine, geological, forestry and agricultural engineering and marine architecture.

An agricultural engineering degree may be obtained at the Technical University of Nova Scotia in Halifax. The first two years must be completed through the engineering diploma program at one of several universities throughout the Province. Programs in forestry and geological engineering are not available in Nova Scotia, however, they are offered at the University of New Brunswick in Fredericton. These programs are either four or five years in length. For each of the programs mentioned above, successful completion of the twelfth grade or its equivalent with a high standing in chemistry and physics is required.

Master's level programs in applied science with a concentration in either marine architecture or marine engineering are offered at the Technical University of Nova Scotia in Halifax. An undergraduate degree in engineering with high standing is required for entry. These programs are generally one to two years in length.

**Skills/Aptitudes** Individuals entering into these occupations should possess a mechanical aptitude and an interest in engineering design and problem solving. The ability to think in an analytical and logical manner and to communicate and work well with others is also necessary as engineers are often involved in teamwork.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **300**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Professional Engineers of Nova Scotia
1888 Brunswick Street, Ste. 920
P.O. Box 129
Halifax, Nova Scotia
B3J 2M4

# V21 MATHEMATICIANS/ STATISTICIANS/ ACTUARIES

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2181 | Mathematicians, Statisticians and Actuaries |
| 2189 | Occs., in Maths, Statistics, Systems Analysis and Related Fields, N.E.C. |

**Principal Duties** This occupational group is concerned with researching mathematical theory, developing and applying mathematical techniques for solving problems in various other fields; conducting surveys to compile statistical data and drawing valid conclusions; systems analysis; and applying mathematical and statistical methods to calculate premium and benefit payments for financial programmes such as insurance, annuities and pensions.

**Requirements** Individuals in these occupations are usually required to have an undergraduate degree in mathematics, statistics or actuarial science. For advancement purposes further study at the graduate level is recommended. Actuaries must complete a series of courses and exams from the Canadian Institute of Actuaries in order to obtain certification.

**Training Paths** A degree in mathematics may be obtained at most universities in Nova Scotia. Dalhousie University, Saint Mary's University and St. Francis Xavier University offer math programs with a concentration in statistics. These degree programs vary in length from three to four years. The entrance requirement is successful completion of the twelfth grade or its equivalent. Acadia University and Dalhousie University offer programs at the Master's level in mathematics also. Actuarial science programs are not offered in Nova Scotia but are available at several universities throughout Canada.

**Skills/Aptitudes** Individuals entering these occupations should possess strong mathematical and analytical skills. Good verbal and written communication skills are also important. Courses in accounting and/or economics would be useful for individuals interested in the actuarial field.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **150**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Executive Director
Canadian Mathematical Society
577 King Edward,
Ottawa, Ont.
K1N 6N5

or

Director of Administration
Canadian Institute of Actuaries
275 Slater St., Suite 1505
Ottawa, Ont.
K1P 5H9

or

Treasurer
Statistical Society of Canada
1280 Main St. West
B3B-133,
Hamilton, Ont.
L8S 4K1

# V22 ECONOMISTS

**Principal Duties** This occupational group is concerned with conducting research, developing and applying principles and theories of economics, and formulating plans for the solution of economic problems. Activities may include developing models to illustrate and forecast economic behaviour and patterns, planning methods for gathering and analyzing economic statistical data, and preparing reports, estimates and forecasts.

**Requirements** While there are no formal requirements to work in this occupation, a Master's degree in Economics is generally specified as the prerequisite for gaining employment.

**Training Paths** A Bachelor's Degree in Economics is available at several universities throughout Nova Scotia. These programs are three or four years in length and require completion of the twelfth grade or its equivalent for admission. A Master's program is available at Dalhousie University in Halifax and at Acadia University in Wolfville. This is a one- or two-year program that require the completion of an undergraduate degree in economics for entrance.

**Skills/Aptitudes** Individuals in this occupation should possess good mathematical and analytical abilities. Good communication skills, both oral and written, are also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **210**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **10**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Atlantic Provinces Economic Council
5121 Sackville Street #500
Halifax, Nova Scotia
B3J 1K1

# V23 SOCIOLOGISTS AND ANTHROPOLOGISTS

**Principal Duties** This occupational group is concerned with investigating the origin, development, evolution, lifestyle and social relationships of groups of human beings. Sociologists concentrate on the structure, social patterns and inter- relationships of human societies while anthropologists are more interested in the origin and functioning of society with emphasis on man's evolution, physical characteristics and geographical distribution. Activities may include collecting, organizing, interpreting and presenting scientific data; conducting experiments; and teaching within a community college or university setting.

**Requirements** Sociologists and anthropologists in any specialty are generally required to hold a Master's or Doctorate degree.

**Training Paths** Undergraduate degrees in sociology and anthropology are available at several universities throughout Nova Scotia. These are generally four-year programs which require the completion of the twelfth grade or its equivalent for entry. A Master's degree in sociology can be obtained from Dalhousie University in Halifax or Acadia University in Wolfville. This is a two-year program which requires the completion of an undergraduate degree for entry. Doctorate degrees in sociology are not available in Nova Scotia but are available at the University of New Brunswick in Fredericton.

**Skills/Aptitudes** Sociologists and Anthropologists should be curious about people and society, and how they interrelate. A knowledge of statistics and computers is necessary when organizing and interpreting data. Good communication skills are needed to obtain information from people, and to relate study results. Objectivity is important when describing and analyzing surveys.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **20**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Canadian Sociology and Anthropology Association
c/o Concordia University
1455 ouest boul. de Maisonneuve
Suite C-323
Montreal, Quebec
H3G 1M8

# V24 PSYCHOLOGISTS

**Principal Duties** This occupational group is concerned with collecting, interpreting, and applying scientific data relating to human behaviour and mental and emotional processes. Activities may include teaching; conducting research on problems pertaining to individual development, human relationships, and the processes of learning and teaching; diagnosing mental disorders; programming remediation for learning and behavior problems; and providing individual and group counselling services.

**Requirements** Individuals working in this occupation must be registered with the Nova Scotia Board of Examiners in Psychology.

The minimum educational requirement for registration in Nova Scotia is a Master's degree although some practitioner, teaching and research positions require a Doctoral degree.

**Training Paths** Most universities in Nova Scotia offer Bachelor's programs in psychology. These are generally four year programs and require the completion of the twelfth grade or its equivalent for entrance. Master's degrees in psychology are offered at Dalhousie University and Saint Mary's University in Halifax, and at Acadia University in Wolfville. These programs are two years in length and require a Bachelor's degree for entrance. The only Doctorate program in this field offered in Nova Scotia is at Dalhousie University. This program requires a Master's degree for entry and a two-year residency upon completion.

**Skills/Aptitudes** A psychologist must have the tact and understanding to deal with persons who might be very distressed or disturbed. This requires maturity, emotional stability and a genuine interest in working with others. An aptitude in mathematics and science, and good writing skills.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **260**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **20**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Association of Psychologists of Nova Scotia
P.O. Box 594
Halifax, Nova Scotia
B3J 2R7

# V25 SOCIAL SCIENCE OCCUPATIONS, NOT ELSEWHERE CLASSIFIED

**Principal Duties** This occupational group is composed of a wide range of occupations, not elsewhere classified, concerned with human society, its social and political institutions, and its environment. Activities may include conducting research into the development and functioning of political institutions; investigating the characteristics of areas of the earth's surface and its inhabitants; interpreting interactions of physical and human environment; researching into past and current events; and studying the origin, development, and structure of languages.

**Requirements** While these occupations have no formal requirements for entrance, it is strongly recommended that the individual possess either a Master's or a Doctoral degree to fully qualify and specialize in one area.

**Training Paths** Undergraduate and Master's degree programs in political science, history, and geography are available at several universities throughout Nova Scotia. An undergraduate degree in home economics is available at Mount Saint Vincent University in Halifax. The Nova Scotia College of Art and Design in Halifax offers a four-year undergraduate program in environmental planning. The Technical University of Nova Scotia, also in Halifax, offers a Master's program in urban and rural planning. The various undergraduate programs are three to four years in length and require the completion of the twelfth grade for admission. The degree programs at the Master's level are two years in length and require the completion of a Bachelor's degree for entry.

**Skills/Aptitudes** Individual skills and aptitudes will vary depending on the area of specialization. An interest in the social sciences at the high school level and enjoyment of reading and writing are necessary. As individuals in these occupations often spend a great deal of time conducting and/or analyzing research, the ability to perform statistical analysis is important. Good communication skills are also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **60**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **above average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **N/A**

**For Further Information Contact**

Social Science Federation of Canada
151 Slater St., Suite 415
Ottawa, Ont.
K1P 5H3

# V26 SOCIAL WORKERS AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2331 | Social Workers |
| 2399 | Other Occupations in Social Sciences and Related Fields, N.E.C. |
| 2339 | Occupations in Social Work and Related Fields, N.E.C. |
| 2391 | Educational and Vocational Counsellors |

**Principal Duties** This occupational group is concerned with giving assistance to individuals, families and groups with problems such as poverty, mental illness, family dysfunction, anti-social behaviour, and inadequate housing. Activities may include providing individual, family and group counselling in the fields of employment, rehabilitation and marital relationships; teaching; research; community development; rehabilitation or organizing and supervising social, recreational and cultural activities in community centres, residential treatment facilities, and similar organizations.

**Requirements** The generally accepted minimum requirement to work in these occupations is a Bachelor's degree in either education, social work, or psychology.

**Training Paths** Undergraduate degrees in education and psychology are available at most universities throughout Nova Scotia. These are either three- or four-year programs and require completion of the twelfth grade or its equivalent for admission. The only institution that offers a Bachelor of Social Work degree is Dalhousie University in Halifax. This program is four years in length with the entrance requirements including the completion of at least one year of another undergraduate program and that the student demonstrate personal suitability and maturity. A Masters of Social Work degree requires the completion of a Bachelor of Social Work degree and a minimum of two years of full-time related work.

**Skills/Aptitudes** Patience, understanding, maturity and good listening skills are all necessary for those working in these occupations. These individuals should also have above average ability to analyze, reason, make decisions and express ideas clearly. An interest in the social welfare of others and a desire to help to improve it are also required.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1870**
- Employment growth between 1987 and 1995 is projected to be: **above average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **120**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 27000**

**For Further Information Contact**

Admissions Co-ordinator,
Maritime School of Social Work
6414 Coburg Road,
Halifax, N.S.
B3H 2A7

# V27 JUDGES, LAWYERS AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2343 | Lawyers |
| 2341 | Judges |

**Principal Duties** This occupational group is concerned with applying principles related to common and statute law in the administration of justice. Activities may include presiding over judicial proceedings, conducting litigation, drawing up legal documents, advising on legal matters and performing other legal or paralegal functions.

**Requirements** In order to practice law in Nova Scotia an individual must have a Bachelor's degree in Law followed by one year of articling or practical experience in a law office. Nova Scotia requires the completion of a bar admission course and exams before a lawyer may practice law.

**Training Paths** Dalhousie University Law School in Halifax offers a three-year Bachelor of Law degree. A high school diploma and at least two years of a university undergraduate program are necessary for admission into law school. Candidates must also score well on a standardized Law School Admissions Test.

**Skills/Aptitudes** Lawyers must have confidence in their own abilities. They must be able to think logically, analytically, and be willing to plead the case of any client. Individuals must be able to respond quickly, and this requires a strong command of language and an ability to express ideas clearly and easily. Tact, patience, tolerance, and an understanding of human nature are also important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1110**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **70**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 51000**

**For Further Information Contact**

Nova Scotia Barristers Society
1475 Hollis Street
Halifax, Nova Scotia
B3J 3M4

# V28 LIBRARIANS AND RELATED OCCUPATIONS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2351 | Librarians and Archivists |
| 2350 | Supervisors: Occupations in Library, Museum and Archival Sciences |
| 2359 | Occupations in Library, Museum and Archival Sciences, N.E.C. |

**Principal Duties** This occupational group is concerned with library, museum, and archival sciences and includes librarians who develop, organize and maintain a collection of library materials; museum curators who plan, organize and maintain collections for museums and art galleries; and archivists who appraise, acquire, organize and maintain permanent records and historically valuable documents.

**Requirements** For professional qualification as a librarian, a Master's degree in library science is required. While there are no such requirements for museum curators, most do have university training in museum studies. Most archivists have a Bachelor or Masters degree in history, although this also is not a formal requirement to work in this field.

**Training Paths** Dalhousie University in Halifax is one of seven schools in Canada offering two-year Master's in Library Science program. A Bachelor's degree in any field is the prerequisite for admission. A three-year Bachelor of Arts degree with a major in Museum Studies is offered at the University College of Cape Breton in Sydney. This program requires grade twelve for admission. A Masters in Museum Studies is offered at the University of Toronto and requires a Bachelor's degree with Honours in any field for entry. Bachelor's degrees in history are offered at several universities throughout Nova Scotia while Master's programs are available at Dalhousie and Saint Mary's University, both located in Halifax, and at Acadia University in Wolfville. These are two-year programs which require the completion of an undergraduate degree for admission.

**Skills/Aptitudes** Individuals considering a career in these fields should possess good research skills, resourcefulness and an eagerness to learn. Good communication skills and a desire to work with and help others is important. Computer skills are increasingly necessary.

## Nova Scotia Labour Market Conditions:

**Employment**
- Estimated employment in 1987: **540**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **30**

**Unemployment**
- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**
- Estimated annual average earnings in 1987: **$ 28000**

**For Further Information Contact**

Nova Scotia Library Association
c/o Nova Scotia Provincial Library
6955 Bayers Road
Halifax, Nova Scotia
B3L 4S4

# V30 UNIVERSITY TEACHERS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2711 | University Teachers |
| 2719 | University Teaching and Related Occupations, N.E.C. |

**Principal Duties** This occupational group is concerned with teaching one or more subjects within a prescribed curriculum and conducting research and publishing findings in a particular field of knowledge within universities and degree-granting colleges.

**Requirements** Employment in these occupations usually requires a Master's degree and/or Ph.D. degree in a specialized area.

**Training Paths** Master's degrees are available in a variety of disciplines at several universities throughout the Province. Individuals in need of more information should consult specific school calendars to determine where applicable programs are taught. Education at the Doctorate level is only available at Dalhousie University and the Technical University of Nova Scotia, both located in Halifax. The Master's level requires a Bachelor's degree for entrance and the Doctorate requires either a Master's or a Bachelor's degree with Honours. The Master's program is typically two years in length. The Doctorate program is generally longer, including two years of course work followed by two or three years of research and thesis writing.

**Skills/Aptitudes** Individuals in these occupations should have good oral and written communication skills. Universities expect their teachers to publish articles regularly and sometimes to write books which necessarily involve a lot of writing. Most university teachers carry out research on which to base their articles so the ability to conduct and analyze research is important.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **1780**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **100**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 41000**

**For Further Information Contact**

Nova Scotia Confederation of University
Faculty Association
1127 Barrington St., Ste. 300
Halifax, Nova Scotia
B3H 2P8

# V31 VETERINARIANS

**Principal Duties** This occupational group is concerned with diagnosing, treating, controlling and preventing animal disorders and disease. Activities may include advising clients on feeding, breeding and care of animals; operating hospitals; and raising animals to be used in research.

**Requirements** To become licensed to practice veterinary medicine in Nova Scotia, individuals must complete a four-year degree in veterinary medicine at a recognized veterinary college, write the National Examining Board examination, and be accepted as a member of the Nova Scotia Veterinary Medicine Association.

**Training Paths** The Atlantic Veterinary College in Prince Edward Island offers a four-year program in this area. To be accepted into veterinary medicine, one must complete at least two years of undergraduate university work and have a solid academic background, preferably in science. Many universities offer courses in pre-veterinary studies. However, because competition is stiff, completion of an undergraduate degree is preferred. A personal essay on the applicant's aspirations for veterinary medicine is also required with the application, as well as considerable farm and clinic experience.

**Skills/Aptitudes** Veterinarians should have an interest in science, especially biology, and they should love and understand animals. Individuals in this occupation should also possess integrity, reliability, maturity, and determination as well as good verbal and written communication skills. Long working hours may be characteristic of this occupation.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **120**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **N/A**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 35000**

**For Further Information Contact**

Nova Scotia Veterinary Medical Association
Agricultural Centre
Kentville, Nova Scotia
B4N 1J5

# V32 TRANSLATORS AND INTERPRETERS

**Principal Duties** Translators are concerned with the written translation from one language to another while interpreters are concerned with the spoken translation in a consecutive or simultaneous manner.

**Requirements** Translators and interpreters are required to hold a Bachelor's degree in translation or linguistics.

**Training Paths** In Canada, most programs concentrate on translation between English and French. Four to five-year programs are offered for written translation at the Universite de Moncton, which is a French language university in New Brunswick, Laval Universite in Quebec, Universite de Montreal, McGill University, Universite du Quebec in Trois- Rivieres, University of Ottawa and Laurentian University in Sudbury, Ontario. Specialized courses in interpreting are available at Laurentian University and at the University of Ottawa. These specialized programs are two years in length.

**Skills/Aptitudes** Translators must have a thorough knowledge of at least two languages and excellent writing skills. A translator should only translate into his/her native language. Interpreters must possess excellent oral expression, a great ability to concentrate, and a good memory. They must be able to think quickly and clearly.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **70**
- Employment growth between 1987 and 1995 is projected to be: **average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **N/A**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **significantly below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 35000**

**For Further Information Contact**

Corporation of Translators and Interpreters
of New Brunswick
C.P. Box 427
Fredericton, NB
E3B 4Z9

# V33 NON-UNIVERSITY TEACHERS

## Most Significant Occupations in this Group

| CCDO # | Title |
|---|---|
| 2731 | Elementary and Kindergarten Teachers |
| 2733 | Secondary School Teachers |
| 1133 | Administrators in Teaching and Related Fields |
| 2791 | Community College and Vocational School Teachers |
| 2739 | Elementary and Secondary School Teaching and Related Occs., N.E.C. |

**Principal Duties** This occupational group is concerned with teaching in kindergarten, elementary and secondary schools and in such institutions as community and teacher's colleges; and nursing, technical, vocational and fine arts schools.

**Requirements** Certification is compulsory in these occupations. A certificate indicating the level of training attained is issued by the Department of Education in Halifax to applicants who provide evidence of satisfactory training.

**Training Paths** Teacher training is provided through several institutes in Nova Scotia. The Nova Scotia Teacher's College in Truro offers a three-year Associate in Education program. Bachelor of Education programs are offered at Acadia University in Wolfville, and at St. Mary's University, Dalhousie University, Mount Saint Vincent University, and the Nova Scotia College of Art and Design, all located in Halifax. At some universities, a one- or two-year Bachelor of Education degree can be earned after completion of another undergraduate degree. These programs allow graduates to teach elementary and secondary school classes. Specialized study leading to Bachelor of Education degrees in Special Education, Physical Education, Music, Home Economics, Industrial Arts, or Early Childhood Education can also be taken at various universities throughout Nova Scotia.

**Skills/Aptitudes** Teachers should enjoy working with young people. They should be patient, imaginative, objective, and resourceful; and be able to communicate ideas in a clear and concise, yet pleasant, manner.

## Nova Scotia Labour Market Conditions:

**Employment**

- Estimated employment in 1987: **15190**
- Employment growth between 1987 and 1995 is projected to be: **below average**
- Average number of new job openings per year (including attrition) between 1987 and 1995 is estimated at: **800**

**Unemployment**

- The unemployment rate during the third quarter of 1987 was: **below average**

**Earnings Potential**

- Estimated annual average earnings in 1987: **$ 34000**

**For Further Information Contact**

Nova Scotia Teachers Union
3106 Dutch Village Road
Halifax, Nova Scotia
B3L 4G1

# APPENDICES

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| A00 | 5193 | ROUTE DRIVER |
| A00 | 6169 | APPAREL AND FURNISHINGS SERVICE OCCUPATIONS, N.E.C. |
| A00 | 7199 | OTHER FARMING HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS, N.E.C. |
| A00 | 7513 | TIMBER CUTTING AND RELATED OCCUPATIONS |
| A00 | 7517 | LOG HOISTING, SORTING, MOVING AND RELATED OCCUPATIONS |
| A00 | 7518 | OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK, FORESTRY AND LOGGING |
| A00 | 7519 | FORESTRY AND LOGGING OCCUPATIONS, N.E.C. |
| A00 | 7718 | OCCS IN LABOUR, ELEMENTAL WORK, MINING, QUARRYING, IN OIL, GAS FIELDS |
| A00 | 8118 | OCCS IN LABOURING AND OTHER ELEMENTAL WORK, MINERAL ORE TREATING |
| A00 | 8148 | OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK, METAL PROCESSING |
| A00 | 8158 | OCCS IN LABOURING, ELEMENTAL WORK: CLAY, GLASS, STONE PROC. AND FORMING |
| A00 | 8178 | OCCS IN LABOUR.,OTHER ELEM. WORK:CHEM.,PETRO.,RUBBER.,PLAS.,REL. MAT. PROC. |
| A00 | 8238 | OCCS IN LABOURING,OTHER ELEM. WORK:WOOD PROCESSING EXCEPT PAPER PULP |
| A00 | 8258 | OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK, PULP AND PAPERMAKING |
| A00 | 8298 | OCCUPATIONS IN LABOURING AND ELEMENTAL WORK, OTHER PROCESSING |
| A00 | 8528 | OCCS IN LABOURING, ELEMENTAL WORK, FAB. AND ASS. METAL PRODUCTS, N.E.C. |
| A00 | 8539 | FAB., ASS., INSTALL, REPAIRING OCCS: ELECT., ELECTRONIC EQUIP., N.E.C. |
| A00 | 8548 | OCCS IN LABOURING, ELEMENTAL WORK: FAB., ASS., REPAIRING, WOOD PRODUCTS |
| A00 | 8562 | UPHOLSTERERS |
| A00 | 8578 | LABOUR, ELEMENTAL WORK: FAB., ASS., REPAIR, RUBBER, PLASTIC PRODUCTS |
| A00 | 8598 | LABOURING, ELEMENTAL WORK: PRODUCT FAB., ASS., REPAIRING, N.E.C. |
| A00 | 8718 | LABOURING AND OTHER ELEMENTAL WORK: EXCAVATING, GRADING AND PAVING |
| A00 | 8738 | LABOURING, ELEMENTAL WORK: ELECT. POWER, LIGHT, COMMS, INSTALLING ,REPAIR. |
| A00 | 8783 | CONCRETE FINISHING AND RELATED OCCUPATIONS |
| A00 | 8787 | ROOFING, WATERPROOFING, AND RELATED OCCUPATIONS |
| A00 | 8798 | OCCS IN LABOURING AND OTHER ELEMENTAL WORK, OTHER CONSTRUCTION TRADES |
| A00 | 9313 | LONGSHORE WORKERS, STEVEDORES AND FREIGHT HANDLERS |
| A00 | 9318 | OCCS IN LABOURING AND OTHER ELEMENTAL WORK MATERIAL HANDLING, N.E.C. |
| A00 | 9518 | LABOURING AND OTHER ELEMENTAL WORK, PRINTING AND RELATED ACTIVITIES |
| B00 | 4159 | MATERIAL RECORDING, SCHEDULING AND DISTRIBUTING OCCUPATIONS, N.E.C. |
| B00 | 4177 | MESSENGERS |
| B00 | 5141 | STREET VENDORS AND DOOR-TO-DOOR SALES OCCUPATIONS |
| B00 | 5143 | NEWSPAPER CARRIERS AND VENDORS |
| B00 | 5145 | SERVICE STATION ATTENDANTS |
| B00 | 6129 | FOOD AND BEVERAGE PREPARATION AND RELATED SERVICE OCCUPATIONS, N.E.C. |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| B00 | 6133 | LODGING CLEANERS, EXCEPT PRIVATE HOUSEHOLD |
| B00 | 6135 | SLEEPING-CAR AND BAGGAGE PORTERS |
| B00 | 6139 | OCCUPATIONS IN LODGING AND OTHER ACCOMMODATION, N.E.C. |
| B00 | 6165 | PRESSING OCCUPATIONS |
| B00 | 6191 | JANITORS, CHARWORKERS AND CLEANERS |
| B00 | 6198 | OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK, SERVICES |
| B00 | 7195 | NURSERY AND RELATED WORKERS |
| B00 | 8213 | BAKING, CONFECTIONERY MAKING AND RELATED OCCUPATIONS |
| B00 | 8217 | FISH CANNING, CURING AND PACKING OCCUPATIONS |
| B00 | 8228 | OCCS IN LABOURING AND OTHER ELEMENTAL WORK: FOOD, BEVERAGE, REL. PROC. |
| B00 | 8278 | OCCUPATIONS IN LABOURING AND OTHER ELEMENTAL WORK, TEXTILE PROCESSING |
| B00 | 8529 | OTHER FABRICATING AND ASSEMBLING OCCUPATIONS, METAL PRODUCTS, N.E.C. |
| B00 | 8538 | OCCS IN LABOUR, ELEM. WORK: FAB.,ASS.,INSTAL.,REPAIR,ELECT.,ELECT. EQUIP. |
| B00 | 8549 | FABRICATING, ASSEMBLING AND REPAIRING OCCS, WOOD PRODUCTS, N.E.C. |
| B00 | 8555 | FURRIERS |
| B00 | 8568 | LABOURING, ELEMENTAL WORK: FAB., ASS., TEX., FUR, LEATHER PRODUCTS |
| B00 | 8571 | BONDING AND CEMENTING OCCUPATIONS, RUBBER, PLASTIC AND RELATED PRODUCTS |
| B00 | 8595 | PAINTING AND DECORATING OCCUPATIONS, EXCEPT CONSTRUCTION |
| B00 | 8599 | OTHER PRODUCT FABRICATING, ASSEMBLING AND REPAIRING OCCUPATIONS, N.E.C. |
| B00 | 9139 | RAILWAY TRANSPORT OPERATING OCCUPATIONS, N.E.C. |
| B00 | 9319 | OTHER MATERIALS HANDLING AND RELATED OCCUPATIONS, N.E.C. |
| C00 | 4157 | WEIGHERS |
| C00 | 6162 | LAUNDERING OCCUPATIONS |
| C00 | 6193 | ELEVATOR-OPERATING OCCUPATIONS |
| C00 | 8111 | CRUSHING AND GRINDING OCCUPATIONS, MINERAL ORES |
| C00 | 8137 | MOULDING, COREMAKING AND METAL CASTING |
| C00 | 8141 | METAL EXTRUDING AND DRAWING OCCUPATIONS |
| C00 | 8143 | PLATING, METAL SPRAYING AND RELATED OCCUPATIONS |
| C00 | 8149 | METAL PROCESSING AND RELATED OCCUPATIONS, N.E.C. |
| C00 | 8153 | SEPARATING, CRUSHING, GRINDING AND MIXING OCCS: CLAY, GLASS AND STONE |
| C00 | 8159 | CLAY, GLASS AND STONE PROCESSING, FORMING AND RELATED OCCS, N.E.C. |
| C00 | 8163 | FILTERING, STRAINING AND SEPARATING OCCS, CHEM. AND RELATED MATERIALS |
| C00 | 8171 | CRUSHING AND GRINDING OCCUPATIONS, CHEMICALS AND RELATED MATERIALS |
| C00 | 8173 | COATING AND CALENDERING OCCUPATIONS, CHEMICAL AND RELATED MATERIALS |
| C00 | 8211 | FLOUR AND GRAIN MILLING OCCUPATIONS |
| C00 | 8215 | SLAUGHTERING AND MEAT CUTTING, CANNING, CURING AND PACKING OCCUPATIONS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| C00 | 8221 | FRUIT AND VEGETABLE CANNING, PRESERVING AND PACKING OCCUPATIONS |
| C00 | 8223 | MILK PROCESSING AND RELATED OCCUPATIONS |
| C00 | 8225 | SUGAR PROCESSING AND RELATED OCCUPATIONS |
| C00 | 8229 | FOOD, BEVERAGE AND RELATED PROCESSING OCCUPATIONS, N.E.C. |
| C00 | 8231 | SAWMILL SAWYERS AND RELATED OCCUPATIONS |
| C00 | 8233 | PLYWOOD MAKING AND RELATED OCCUPATIONS |
| C00 | 8235 | WOOD TREATING OCCUPATIONS |
| C00 | 8239 | WOOD PROCESSING OCCUPATIONS, EXCEPT PAPER PULP, N.E.C. |
| C00 | 8259 | PULP AND PAPERMAKING AND RELATED OCCUPATIONS, N.E.C. |
| C00 | 8261 | TEXTILE FIBRE PREPARING OCCUPATIONS |
| C00 | 8263 | TEXTILE SPINNING AND TWISTING OCCUPATIONS |
| C00 | 8265 | TEXTILE WINDING AND REELING OCCUPATIONS |
| C00 | 8267 | TEXTILE WEAVING OCCUPATIONS |
| C00 | 8271 | KNITTING OCCUPATIONS |
| C00 | 8275 | TEXTILE FINISHING AND CALENDERING OCCUPATIONS |
| C00 | 8279 | TEXTILE PROCESSING OCCUPATIONS, N.E.C. |
| C00 | 8293 | TOBACCO PROCESSING OCCUPATIONS |
| C00 | 8295 | HIDE AND PELT PROCESSING OCCUPATIONS |
| C00 | 8334 | METALWORKING-MACHINE OPERATORS, N.E.C. |
| C00 | 8339 | METAL SHAPING AND FORMING OCCUPATIONS, EXCEPT MACHINING, N.E.C. |
| C00 | 8353 | WOOD SAWING AND RELATED OCCUPATIONS EXCEPT SAWMILL |
| C00 | 8355 | PLANING, TURNING, SHAPING AND RELATED WOOD MACHINING OCCUPATIONS |
| C00 | 8357 | WOOD SANDING OCCUPATIONS |
| C00 | 8359 | WOOD MACHINING OCCUPATIONS, N.E.C. |
| C00 | 8393 | FILING, GRINDING, BUFFING, CLEANING AND POLISHING OCCUPATIONS, N.E.C. |
| C00 | 8513 | MOTOR VEHICLE FABRICATING AND ASSEMBLING OCCUPATIONS, N.E.C. |
| C00 | 8531 | ELECTRICAL EQUIPMENT FABRICATING AND ASSEMBLING OCCUPATIONS |
| C00 | 8534 | ELECTRONIC EQUIPMENT FABRICATING AND ASSEMBLING OCCUPATIONS |
| C00 | 8551 | PATTERNMAKING, MARKING AND CUTTING OCCS: TEXTILE, FUR, LEATHER PRODUCTS |
| C00 | 8557 | MILLINERS, HAT AND CAP MAKERS |
| C00 | 8561 | SHOEMAKING AND REPAIRING OCCUPATIONS |
| C00 | 8563 | SEWING MACHINE OPERATORS, TEXTILE AND SIMILAR MATERIALS |
| C00 | 8569 | FAB., ASS., REPAIRING OCCS: TEXTILE, FUR AND LEATHER PRODUCTS, N.E.C. |
| C00 | 8573 | MOULDING OCCUPATIONS, RUBBER, PLASTIC AND RELATED PRODUCTS |
| C00 | 8575 | CUTTING AND FINISHING OCCUPATIONS, RUBBER, PLASTIC AND RELATED PRODUCTS |
| C00 | 8579 | FAB., ASS. AND REPAIRING OCCS, RUBBER, PLASTIC AND RELATED OCCS, N.E.C. |
| C00 | 8593 | PAPER PRODUCT FABRICATING AND ASSEMBLING OCCUPATIONS |

# APPENDIX A

**TRANSLATION INDEX**
**FROM OCCUPATIONAL GROUP CODE TO CCDO CODE**
**(continued)**

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| C00 | 9317 | PACKAGING OCCUPATIONS, N.E.C. |
| D00 | 7713 | OTHER ROCK AND SOIL DRILLING OCCUPATIONS |
| D00 | 7717 | MINING AND QUARRYING: CUTTING, HANDLING AND LOADING OCCUPATIONS |
| D00 | 8711 | EXCAVATING, GRADING AND RELATED OCCUPATIONS |
| D00 | 8713 | PAVING, SURFACING AND RELATED OCCUPATIONS |
| D00 | 8715 | RAILWAY SECTION AND TRACK WORKERS |
| D00 | 8719 | EXCAVATING, GRADING, PAVING AND RELATED OCCUPATIONS, N.E.C. |
| D00 | 9193 | RAIL VEHICLE OPERATORS, EXCEPT RAILWAY TRANSPORT |
| D00 | 9199 | OTHER TRANSPORT AND RELATED EQUIPMENT OPERATING OCCUPATIONS, N.E.C. |
| D00 | 9311 | HOISTING OCCUPATIONS, N.E.C. |
| D00 | 9315 | MATERIAL-HANDLING EQUIPMENT OPERATORS, N.E.C. |
| E00 | 7719 | MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCUPATIONS, N.E.C. |
| E00 | 8113 | MIXING, SEPARATING, FILTERING AND RELATED OCCUPATIONS, MINERAL ORES |
| E00 | 8115 | MELTING AND ROASTING OCCUPATIONS, MINERAL ORES |
| E00 | 8119 | MINERAL ORE TREATING OCCUPATIONS, N.E.C. |
| E00 | 8131 | METAL SMELTING, CONVERTING AND REFINING FURNACE OCCUPATIONS |
| E00 | 8133 | METAL HEAT-TREATING OCCUPATIONS |
| E00 | 8135 | METAL ROLLING OCCUPATIONS |
| E00 | 8151 | FURNACE AND KILN WORKERS: CLAY, GLASS AND STONE |
| E00 | 8155 | FORMING OCCUPATIONS: CLAY, GLASS AND STONE |
| E00 | 8161 | MIXING AND BLENDING OCCUPATIONS, CHEMICALS AND RELATED MATERIALS |
| E00 | 8165 | DISTILLING, SUBLIMING AND CARBONIZING OCCS, CHEM. AND RELATED MATERIALS |
| E00 | 8167 | ROASTING, COOKING AND DRYING OCCS, CHEMICALS AND RELATED MATERIALS |
| E00 | 8179 | CHEM.,PETRO.,RUBBER,PLASTIC,REL. MATERIALS PROCESSING OCCS,N.E.C. |
| E00 | 8227 | BEVERAGE PROCESSING OCCUPATIONS |
| E00 | 8251 | CELLULOSE PULP PREPARING OCCUPATIONS |
| E00 | 8253 | PAPERMAKING AND FINISHING OCCUPATIONS |
| E00 | 8273 | TEXTILE BLEACHING AND DYEING OCCUPATIONS |
| E00 | 8299 | OTHER PROCESSING OCCUPATIONS, N.E.C. |
| E00 | 8315 | MACHINE-TOOL OPERATING OCCUPATIONS |
| E00 | 8319 | METAL MACHINING OCCUPATIONS, N.E.C. |
| E00 | 8331 | FORGING OCCUPATIONS |
| E00 | 8351 | WOOD PATTERNMAKING OCCUPATIONS |
| E00 | 8371 | CUTTING AND SHAPING OCCS: CLAY, GLASS, STONE AND RELATED MATERIAL |
| E00 | 8373 | ABRADING AND POLISHING OCCS: CLAY, GLASS, STONE AND RELATED MATERIALS |
| E00 | 8379 | CLAY, GLASS, STONE AND RELATED MATERIALS MACHINING OCCUPATIONS, N.E.C. |
| E00 | 8391 | ENGRAVERS, ETCHERS, AND RELATED OCCUPATIONS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| E00 | 8395 | PATTERNMAKERS AND MOULDMAKERS, N.E.C. |
| E00 | 8399 | OTHER MACHINING AND RELATED OCCUPATIONS, N.E.C. |
| E00 | 8511 | ENGINE AND RELATED EQUIPMENT FABRICATING AND ASSEMBLING OCCS, N.E.C. |
| E00 | 8523 | INDUST., FARM, CONST., MECHANIZED EQUIP., MACH. FAB. ASS. OCCS, N.E.C. |
| E00 | 8525 | BUSINESS, COMMERCIAL MACHINES FABRICATING AND ASSEMBLING OCCS, N.E.C. |
| E00 | 8527 | PRECISION INSTRUMENTS, FABRICATING AND ASSEMBLING OCCUPATIONS, N.E.C. |
| E00 | 8541 | CABINET AND WOOD FURNITURE MAKERS |
| E00 | 8591 | JEWELLERY AND SILVERWARE FABRICATING, ASSEMBLING AND REPAIRING OCCS |
| E00 | 9119 | AIR TRANSPORT OPERATING OCCUPATIONS, N.E.C. |
| E00 | 9135 | RAILWAY TRANSPORT OPERATING SUPPORT OCCUPATIONS |
| E00 | 9512 | PRINTING PRESS OCCUPATIONS |
| E00 | 9513 | STEREOTYPING AND ELECTROTYPING OCCUPATIONS |
| E00 | 9517 | BOOKBINDING AND RELATED OCCUPATIONS |
| E00 | 9519 | PRINTING AND RELATED OCCUPATIONS, N.E.C. |
| F00 | 3375 | ATTENDANTS, SPORT AND RECREATION |
| F00 | 4172 | MAIL CARRIERS |
| F00 | 4191 | COLLECTORS |
| F00 | 6115 | GUARDS AND RELATED SECURITY OCCUPATIONS |
| F00 | 8786 | INSULATING OCCUPATIONS, CONSTRUCTION |
| F00 | 9133 | CONDUCTORS AND BRAKE WORKERS, RAILWAY |
| F00 | 9591 | PHOTOGRAPHIC PROCESSING AND FINISHING OCCUPATIONS |
| F00 | 9919 | OTHER OCCUPATIONS, N.E.C. |
| G00 | 6123 | BARTENDERS |
| G00 | 6125 | FOOD AND BEVERAGE SERVING OCCUPATIONS |
| G01 | 6147 | CHILD CARE OCCUPATIONS |
| G01 | 6149 | PERSONAL SERVICE OCCUPATIONS, N.E.C. |
| G02 | 6144 | GUIDES |
| G02 | 6145 | TRAVEL AND RELATED ATTENDANTS, EXCEPT FOOD AND BEVERAGE |
| G03 | 6199 | OTHER SERVICE OCCUPATIONS, N.E.C. |
| G04 | 6143 | BARBERS, HAIRDRESSERS AND RELATED OCCUPATIONS |
| G05 | 4194 | HOTEL CLERKS |
| G06 | 4133 | TELLERS AND CASHIERS |
| G06 | 5135 | SALES WORKERS, COMMODITIES, N.E.C. |
| G06 | 5137 | SALES CLERKS, COMMODITIES |
| H00 | 9170 | SUPERVISORS, MOTOR TRANSPORT OPERATING OCCUPATIONS |
| H00 | 9171 | BUS DRIVERS |
| H00 | 9173 | TAXI DRIVERS AND CHAUFFEURS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| H00 | 9175 | TRUCK DRIVERS |
| H00 | 9179 | MOTOR TRANSPORT OPERATING OCCUPATIONS, N.E.C. |
| H00 | 9190 | SUPERVISORS, OTHER TRANSPORT AND RELATED EQUIPMENT OPERATING OCCS |
| H00 | 9191 | SUBWAY AND STREET RAILWAY OPERATING OCCUPATIONS |
| I01 | 9157 | ENGINE AND BOILER ROOM CREW, SHIP |
| I02 | 9159 | WATER TRANSPORT OPERATING OCCUPATIONS, N.E.C. |
| I03 | 9155 | DECK CREW, SHIP |
| I04 | 9153 | ENGINEER OFFICERS, SHIP |
| I05 | 9151 | DECK OFFICERS |
| I06 | 7313 | NET, TRAP AND LINE FISHING OCCUPATIONS |
| I07 | 7311 | CAPTAINS AND OTHER OFFICERS, FISHING VESSELS |
| I08 | 7315 | TRAPPING AND RELATED OCCUPATIONS |
| I08 | 7319 | FISHING, TRAPPING AND RELATED OCCUPATIONS, N.E.C. |
| J01 | 8110 | FOREMEN/WOMEN, MINERAL ORE TREATING OCCUPATIONS |
| J01 | 8116 | INSPECTING, TESTING, GRADING AND SAMPLING OCCS, MINERAL ORE TREATING |
| J02 | 7710 | FOREMEN/WOMEN,MINING AND QUARRYING INCLUDING OIL AND GAS FIELD OCCS |
| J05 | 7715 | BLASTING OCCUPATIONS |
| J06 | 7711 | ROTARY WELL-DRILLING AND RELATED OCCUPATIONS |
| K01 | 7112 | FARMERS |
| K01 | 7131 | FARM MANAGEMENT OCCUPATIONS |
| K01 | 7180 | FOREMEN/WOMEN:OTHER FARMING,HORTICULTURAL AND ANIMAL-HUSBANDRY OCCUPATIONS |
| K01 | 7182 | FARM WORKERS |
| K01 | 7197 | FARM MACHINERY OPERATORS AND CUSTOM OPERATORS |
| K02 | 7510 | FOREMEN/WOMEN, FORESTRY AND LOGGING OCCUPATIONS |
| K02 | 7511 | FORESTRY CONSERVATION OCCUPATIONS |
| K02 | 7516 | LOG INSPECTING, GRADING, SCALING AND RELATED OCCUPATIONS |
| L01 | 6120 | SUPERVISORS, FOOD AND BEVERAGE PREPARATION AND RELATED SERVICE OCCS |
| L02 | 6130 | SUPERVISORS, OCCUPATIONS IN LODGING AND OTHER ACCOMMODATION |
| L05 | 8130 | FOREMAN/WOMEN, METAL PROCESSING AND RELATED OCCUPATIONS |
| L05 | 8146 | INSPECTING, TESTING, GRADING AND SAMPLING OCCUPATIONS, METAL PROCESSING |
| L07 | 8160 | FOREMEN/WOMEN:CHEM.,PETRO.,RUBBER,PLASTICS,RELATED MATS. PROCESSING OCCS |
| L07 | 8176 | INSPECTING,TESTING,SAMPLING OCCS:CHEM.,PETRO.,RUBBER,PLAS.,REL. MAT. PROC. |
| L08 | 8210 | FOREMEN/WOMEN: FOOD, BEVERAGE AND RELATED PROCESSING OCCUPATIONS |
| L08 | 8226 | INSPECTING, TESTING, GRADING, SAMPLING OCCS: FOOD, BEVERAGE, REL. PROC. |
| L09 | 8230 | FOREMEN/WOMEN: WOOD PROCESSING OCCUPATIONS, EXCEPT PAPER PULP |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| L09 | 8236 | INSPECTING, TESTING AND GRADING OCCS: WOOD PROCESSING EXCEPT PAPER PULP |
| L09 | 8350 | FOREMEN/WOMEN, WOOD PROCESSING OCCUPATIONS |
| L09 | 8356 | INSPECTING OCCUPATIONS, WOOD MACHINING |
| L09 | 8540 | FOREMEN/WOMEN: FABRICATING, ASSEMBLING AND REPAIRING OCCS, WOOD PRODUCTS |
| L09 | 8546 | INSPECTING, GRADING OCCS: FAB., ASSEMBLING AND REPAIRING, WOOD PRODUCTS |
| L10 | 8250 | FOREMEN/WOMEN, PULP AND PAPERMAKING AND RELATED OCCUPATIONS |
| L10 | 8256 | INSPECTING, TESTING, GRADING AND SAMPLING OCCS, PULP AND PAPERMAKING |
| L11 | 8260 | FOREMAN/WOMEN, TEXTILE PROCESSING OCCUPATIONS |
| L11 | 8276 | INSPECTING, TESTING, GRADING AND SAMPLING OCCS, TEXTILE PROCESSING |
| L17 | 8570 | FOREMEN/WOMEN:FAB.,ASS.,REPAIRING OCCS, RUBBER, PLASTIC, RELATED PRODUCTS |
| L17 | 8576 | INSPECT, TEST, GRADE, SAMPLING OCCS: FAB,, ASS, REPAIR, RUBBER, PLASTIC |
| L20 | 8780 | FOREMEN/WOMEN, OTHER CONSTRUCTION TRADES OCCUPATIONS |
| L20 | 8796 | INSPECTING AND TESTING OCCUPATIONS, CONSTRUCTION, EXCEPT ELECTRICAL |
| L25 | 1116 | INSPECTORS AND REGULATORY OFFICERS, GOVERNMENT |
| L25 | 1176 | INSPECTORS AND REGULATORY OFFICERS, NON-GOVERNMENT |
| L26 | 8396 | INSPECTING AND TESTING OCCUPATIONS, MACHINING, N.E.C. |
| L26 | 8510 | FOREMEN/WOMEN, FABRICATING AND ASSEMBLING OCCS, METAL PRODUCTS, N.E.C. |
| L26 | 8526 | INSPECTING, TESTING OCCS, FAB. AND ASS. METAL PRODUCTS, N.E.C. |
| M00 | 8311 | TOOL-AND-DIE MAKING OCCUPATIONS |
| M01 | 8310 | FOREMEN/WOMEN, METAL MACHINING OCCUPATIONS |
| M01 | 8313 | MACHINIST AND MACHINE-TOOL SETTING-UP OCCUPATIONS |
| M01 | 8316 | INSPECTING AND TESTING OCCUPATIONS, METAL MACHINING |
| M02 | 8330 | FOREMEN/WOMEN, METAL SHAPING AND FORMING OCCUPATIONS, EXCEPT MACHINING |
| M02 | 8333 | SHEET-METAL WORKERS |
| M02 | 8336 | INSPECTING, TESTING OCCS, METAL SHAPING AND FORMING, EXCEPT MACHINING |
| M03 | 8335 | WELDING AND FLAME CUTTING OCCUPATIONS |
| M04 | 8580 | FOREMEN/WOMEN: MECHANICS AND REPAIRERS, EXCEPT ELECTRICAL |
| M04 | 8586 | INSPECTING AND TESTING OCCUPATIONS, EQUIPMENT REPAIR, N.E.C. |
| M04 | 8589 | OTHER MECHANICS AND REPAIRERS, EXCEPT ELECTRICAL, N.E.C. |
| M05 | 8581 | MOTOR-VEHICLE MECHANICS AND REPAIRERS |
| M06 | 8582 | AIRCRAFT MECHANICS AND REPAIRERS |
| M07 | 8583 | RAIL TRANSPORT EQUIPMENT MECHANICS AND REPAIRERS |
| M08 | 8584 | INDUSTRIAL, FARM AND CONSTRUCTION MACHINERY MECHANICS AND REPAIRERS |
| M09 | 8592 | MARINE CRAFT FABRICATING, ASSEMBLING AND REPAIRING OCCUPATIONS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| M10 | 8730 | FOREMEN/WOMEN:ELECTRICAL POWER,LIGHTING AND WIRE COMMUNICATIONS EQUIPMENT |
| M10 | 8731 | ELECTRICAL POWER LINE WORKERS AND RELATED OCCUPATIONS |
| M10 | 8736 | INSPECTING, TESTING OCCS: ELECT. POWER, LIGHT, COMMS., INSTALL, REPAIR |
| M10 | 8739 | ELECT. POWER,LIGHT. AND WIRE COMMS. EQUIP.,ERECT.,INSTALL.,REPAIR.,N.E.C. |
| M11 | 8733 | CONSTRUCTION ELECTRICIANS AND REPAIR WORKERS |
| M13 | 8781 | CARPENTERS AND RELATED OCCUPATIONS |
| M14 | 8782 | BRICK AND STONE MASONS AND TILE SETTERS |
| M15 | 8784 | PLASTERERS AND RELATED OCCUPATIONS |
| M16 | 8785 | PAINTERS, PAPERHANGERS AND RELATED OCCUPATIONS |
| M17 | 8791 | PIPEFITTING,PLUMBING AND RELATED OCCUPATIONS, N.E.C. |
| M18 | 8793 | STRUCTURAL-METAL ERECTORS |
| M19 | 8795 | GLAZIERS |
| M20 | 9530 | FOREMEN/WOMEN, STATIONARY ENGINE AND UTILITIES EQUIP. OPERATING |
| M20 | 9539 | STATIONARY ENGINE AND UTILITIES EQUIP. OPERATING OCCS, N.E.C. |
| M21 | 8515 | AIRCRAFT FABRICATING AND ASSEMBLING OCCUPATIONS, N.E.C. |
| M22 | 8587 | WATCH AND CLOCK REPAIRERS |
| M23 | 8337 | BOILERMAKERS, PLATERS AND STRUCTURAL-METAL WORKERS |
| M24 | 9131 | LOCOMOTIVE OPERATING OCCUPATIONS |
| M25 | 6121 | CHEFS AND COOKS |
| M26 | 8799 | OTHER CONSTRUCTION TRADES, N.E.C. |
| M27 | 8553 | TAILORS AND DRESSMAKERS |
| N00 | 4130 | SUPERVISORS, BOOKKEEPING, ACCOUNT-RECORDING AND RELATED OCCUPATIONS |
| N00 | 4131 | BOOKKEEPERS AND ACCOUNTING CLERKS |
| N00 | 4135 | INSURANCE, BANK AND OTHER FINANCE CLERKS |
| N00 | 4137 | STATISTICAL CLERKS |
| N00 | 4139 | BOOKKEEPING, ACCOUNT-RECORDING AND RELATED OCCUPATIONS, N.E.C. |
| N00 | 4141 | OFFICE MACHINE OPERATORS |
| N00 | 4150 | SUPERVISORS: MATERIAL RECORDING, SCHEDULING AND DISTRIBUTING OCCS |
| N00 | 4151 | PRODUCTION CLERKS |
| N00 | 4153 | SHIPPING AND RECEIVING CLERKS |
| N00 | 4155 | STOCK CLERKS AND RELATED OCCUPATIONS |
| N00 | 4161 | LIBRARY AND FILE CLERKS |
| N00 | 4169 | LIBRARY, FILE, CORRESPONDENCE CLERKS AND RELATED OCCUPATIONS, N.E.C. |
| N00 | 4170 | SUPERVISORS: RECEPTION, INFORMATION, MAIL AND MESSAGE DISTRIBUTION OCCS |
| N00 | 4171 | RECEPTIONISTS AND INFORMATION CLERKS |
| N00 | 4173 | MAIL AND POSTAL CLERKS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| N00 | 4175 | TELEPHONE OPERATORS |
| N00 | 4179 | RECEPTION, INFORMATION, MAIL AND MESSAGE DISTRIBUTION OCCS, N.E.C. |
| N00 | 4190 | SUPERVISORS, OTHER CLERICAL AND RELATED OCCUPATIONS, N.E.C. |
| N00 | 4192 | ADJUSTERS, CLAIM |
| N00 | 4193 | TRAVEL CLERKS, TICKET, STATION AND FREIGHT AGENTS |
| N00 | 4195 | PERSONNEL CLERKS |
| N00 | 4197 | GENERAL OFFICE CLERKS |
| N00 | 4199 | OTHER CLERICAL AND RELATED OCCUPATIONS, N.E.C. |
| N00 | 9553 | TELEGRAPH OPERATORS |
| N01 | 4110 | SUPERVISORS, STENOGRAPHIC AND TYPING OCCUPATIONS |
| N01 | 4111 | SECRETARIES AND STENOGRAPHERS |
| N01 | 4113 | TYPISTS AND CLERK-TYPISTS |
| O00 | 3370 | COACHES,SPORT AND RECREATION |
| O00 | 3371 | REFEREES AND RELATED OFFICIALS |
| O00 | 3373 | ATHLETES |
| O00 | 3379 | OCCUPATIONS IN SPORT AND RECREATION, N.E.C. |
| P01 | 2160 | SUPERVISORS, OTHER OCCUPATIONS IN ARCHITECTURE AND ENGINEERING |
| P01 | 2165 | ARCHITECTURAL AND ENGINEERING TECHNOLOGISTS AND TECHNICIANS |
| P01 | 8535 | ELECTRONIC AND RELATED EQUIPMENT INSTALLING AND REPAIRING OCCS, N.E.C. |
| P01 | 8537 | RADIO AND TELEVISION SERVICE REPAIRERS |
| P01 | 8585 | BUSINESS AND COMMERCIAL MACHINE MECHANICS AND REPAIRERS |
| P01 | 8735 | WIRE COMMUNICATIONS AND RELATED EQUIPMENT INSTALLING AND REPAIRING OCCS |
| P01 | 9550 | SUPERVISORS, ELECTRONIC, COMMUNICATIONS EQUIP. OPERATING OCCS, N.E.C. |
| P01 | 9551 | RADIO AND TELEVISION BROADCASTING EQUIPMENT OPERATORS |
| P01 | 9559 | ELECTRONIC AND RELATED COMMUNICATIONS EQUIPMENT OPERATING OCCS, N.E.C. |
| P02 | 8533 | ELECTRICAL AND RELATED EQUIPMENT, INSTALLING AND REPAIRING OCCS, N.E.C. |
| P02 | 9531 | POWER STATION OPERATORS |
| P03 | 8588 | PRECISION INSTRUMENT MECHANICS AND REPAIRERS |
| Q00 | 1137 | SALES AND ADVERTISING MANAGEMENT OCCUPATIONS |
| Q00 | 5130 | SUPERVISORS: SALES OCCUPATIONS, COMMODITIES |
| Q00 | 5131 | TECHNICAL SALES OCCUPATIONS AND RELATED ADVISERS |
| Q00 | 5133 | COMMERCIAL TRAVELLERS |
| Q00 | 5149 | SALES OCCUPATIONS, COMMODITIES, N.E.C. |
| Q00 | 5170 | SUPERVISORS: SALES OCCUPATIONS, SERVICES |
| Q00 | 5171 | INSURANCE SALES OCCUPATIONS AND AGENTS |
| Q00 | 5172 | REAL ESTATE SALES OCCUPATIONS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| Q00 | 5173 | SALES AGENT AND TRADERS, SECURITIES |
| Q00 | 5174 | ADVERTISING SALES OCCUPATIONS |
| Q00 | 5177 | BUSINESS SERVICES SALES OCCUPATIONS |
| Q00 | 5179 | SALES OCCUPATIONS: SERVICES, N.E.C. |
| Q00 | 5190 | SUPERVISORS, OTHER SALES OCCUPATIONS |
| Q00 | 5199 | OTHER SALES OCCUPATIONS, N.E.C. |
| R01 | 3332 | MUSICIANS |
| R01 | 3333 | OCCUPATIONS IN MUSIC, N.E.C. |
| R02 | 3330 | PRODUCERS AND DIRECTORS, PERFORMING AND AUDIOVISUAL ARTS |
| R02 | 3335 | ACTING OCCUPATIONS |
| R02 | 3337 | RADIO AND TELEVISION ANNOUNCERS |
| R02 | 3339 | OCCUPATIONS IN PERFORMING AND AUDIOVISUAL ARTS, N.E.C. |
| R04 | 3313 | PRODUCT AND INTERIOR DESIGNERS |
| R05 | 3311 | PAINTERS, SCULPTORS AND RELATED ARTISTS |
| R05 | 3314 | ADVERTISING AND ILLUSTRATING ARTISTS |
| S04 | 2117 | PHYSICAL SCIENCES TECHNOLOGISTS AND TECHNICIANS |
| S04 | 2119 | OCCUPATIONS IN PHYSICAL SCIENCES, N.E.C. |
| S05 | 2135 | LIFE SCIENCES TECHNOLOGISTS AND TECHNICIANS |
| S05 | 2139 | OCCUPATIONS IN LIFE SCIENCES, N.E.C. |
| S06 | 2161 | SURVEYORS |
| S06 | 2169 | OTHER OCCUPATIONS IN ARCHITECTURE AND ENGINEERING, N.E.C. |
| S07 | 2163 | DRAUGHTING OCCUPATIONS |
| S08 | 2183 | SYSTEMS ANALYSTS, COMPUTER PROGRAMMERS AND RELATED OCCUPATIONS |
| S09 | 2333 | OCCUPATIONS IN WELFARE AND COMMUNITY SERVICES |
| S10 | 2349 | OCCUPATIONS IN LAW AND JURISPRUDENCE, N.E.C. |
| S11 | 2353 | TECHNICIANS IN LIBRARY, MUSEUM AND ARCHIVAL SCIENCES |
| S11 | 4160 | SUPERVISORS: LIBRARY, FILE, CORRESPONDENCE CLERKS AND RELATED OCCS |
| S12 | 2511 | MINISTERS OF RELIGION |
| S12 | 2513 | NUNS AND BROTHERS |
| S12 | 2519 | OCCUPATIONS IN RELIGION, N.E.C. |
| S14 | [illegible]5 | PHOTOGRAPHERS AND CAMERA OPERATORS |
| S14 | [illegible]555 | SOUND AND VIDEO RECORDING AND REPRODUCTION EQUIPMENT OPERATORS |
| S15 | 3352 | WRITERS AND EDITORS |
| S15 | 3359 | OCCUPATIONS IN WRITING, N.E.C. |
| S17 | 4140 | SUPERV., OFF. MACHINE, ELECTRONIC DATA-PROCESSING EQUIPMENT OPERATORS |
| S17 | 4143 | ELECTRONIC DATA-PROCESSING EQUIPMENT OPERATORS |
| S19 | 6111 | FIRE-FIGHTING OCCUPATIONS |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| S20 | 6112 | POLICE OFFICERS AND DETECTIVES, GOVERNMENT |
| S20 | 6113 | POLICE AGENTS AND INVESTIGATORS, PRIVATE |
| S20 | 6119 | OTHER PROTECTIVE SERVICE OCCUPATIONS, N.E.C. |
| S21 | 6141 | FUNERAL DIRECTORS, EMBALMERS AND RELATED OCCUPATIONS |
| S22 | 9111 | AIR PILOTS, FLIGHT OFFICERS AND FLIGHT ENGINEERS |
| S23 | 9110 | SUPERVISORS, AIR TRANSPORT OPERATING OCCUPATIONS |
| S23 | 9113 | AIR TRANSPORT OPERATING SUPPORT OCCUPATIONS |
| S24 | 9510 | FOREMEN/WOMEN, PRINTING AND RELATED OCCUPATIONS |
| S24 | 9511 | TYPESETTING AND COMPOSING OCCUPATIONS |
| S24 | 9514 | PRINTING/ENGRAVING, EXCEPT PHOTOENGRAVING OCCUPATIONS |
| S24 | 9515 | PHOTOENGRAVING AND RELATED OCCUPATIONS |
| S26 | 9557 | MOTION-PICTURE PROJECTIONISTS |
| T01 | 1113 | GOVERNMENT ADMINISTRATORS |
| T01 | 1115 | POSTAL MANAGEMENT OCCUPATIONS |
| T01 | 1119 | OFFICIALS AND ADMINISTRATORS UNIQUE TO GOVERNMENT, N.E.C. |
| T01 | 1130 | GENERAL MANAGERS AND OTHER SENIOR OFFICIAL |
| T04 | 1136 | PERSONNEL AND INDUSTRIAL RELATIONS MANAGEMENT OCCUPATIONS |
| T04 | 1174 | PERSONNEL AND RELATED OFFICERS |
| T05 | 1141 | PURCHASING MANAGEMENT OCCUPATIONS |
| T06 | 1142 | SERVICES MANAGEMENT OCCUPATIONS |
| T06 | 6131 | MANAGERS: HOTEL,MOTEL AND OTHER ACCOMODATION |
| T07 | 1143 | PRODUCTION MANAGEMENT OCCUPATIONS |
| T08 | 1145 | MANAGEMENT OCCUPATIONS, CONSTRUCTION OPERATIONS |
| T11 | 1134 | ADMINISTRATORS IN MEDICINE AND HEALTH |
| T12 | 1135 | FINANCIAL MANAGEMENT OCCUPATIONS |
| T12 | 1171 | ACCOUNTANTS, AUDITORS AND OTHER FINANCIAL OFFICERS |
| T13 | 1175 | PURCHASING OFFICERS AND BUYERS, EXCEPT WHOLESALE AND RETAIL TRADE |
| T13 | 5191 | BUYERS, WHOLESALE AND RETAIL TRADE |
| U01 | 3111 | PHYSICIANS AND SURGEONS |
| U02 | 3113 | DENTISTS |
| U03 | 3117 | OSTEOPATHS AND CHIROPRACTORS |
| U04 | 3153 | OPTOMETRISTS |
| U06 | 3151 | PHARMACISTS |
| U07 | 3152 | DIETITIANS AND NUTRITIONISTS |
| U08 | 3130 | SUPERVISORS NURSING OCCUPATIONS |
| U08 | 3131 | NURSES, GRADUATE, EXCEPT SUPERVISORS |
| U10 | 3119 | HEALTH DIAGNOSING AND TREATING OCCUPATIONS, N.E.C. |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| U11 | 3137 | PHYSIOTHERAPISTS, OCCUPATIONAL AND OTHER THERAPISTS |
| U12 | 3156 | MEDICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS |
| U13 | 3157 | DENTURISTS, DENTAL HYGIENISTS, DENTAL ASSISTANTS AND DENTAL TECHNICIANS |
| U14 | 3155 | RADIOLOGICAL TECHNOLOGISTS AND TECHNICIANS |
| U16 | 3154 | DISPENSING OPTICIANS |
| U20 | 3134 | REGISTERED NURSING ASSISTANT |
| U20 | 3139 | NURSING, THERAPY AND RELATED ASSISTING OCCUPATIONS, N.E.C. |
| U22 | 3133 | NURSES IN TRAINING |
| U22 | 3159 | OTHER OCCUPATIONS IN MEDICINE AND HEALTH, N.E.C. |
| V01 | 2111 | CHEMISTS |
| V02 | 2112 | GEOLOGISTS AND RELATED OCCUPATIONS |
| V03 | 2113 | PHYSICISTS |
| V04 | 2114 | METEOROLOGISTS |
| V05 | 2131 | AGRICULTURISTS AND RELATED SCIENTISTS |
| V06 | 2133 | BIOLOGISTS AND RELATED SCIENTISTS |
| V07 | 2141 | ARCHITECTS |
| V08 | 2142 | CHEMICAL ENGINEERS |
| V09 | 2143 | CIVIL ENGINEERS |
| V10 | 2144 | ELECTRICAL ENGINEERS |
| V11 | 2145 | INDUSTRIAL ENGINEERS |
| V13 | 2147 | MECHANICAL ENGINEERS |
| V14 | 2151 | METALLURGICAL ENGINEERS |
| V15 | 2153 | MINING ENGINEERS |
| V16 | 2154 | PETROLEUM ENGINEERS |
| V17 | 2155 | AEROSPACE ENGINEERS |
| V20 | 2159 | PROFESSIONAL ENGINEERS, N.E.C. |
| V21 | 2181 | MATHEMATICIANS, STATISTICIANS AND ACTUARIES |
| V21 | 2189 | OCCS IN MATHS, STATISTICS, SYSTEMS ANALYSIS AND RELATED FIELDS, N.E.C. |
| V22 | 2311 | ECONOMISTS |
| V23 | 2313 | SOCIOLOGISTS, ANTHROPOLOGISTS AND RELATED SOCIAL SCIENTISTS |
| V24 | 2315 | PSYCHOLOGISTS |
| V25 | 2319 | OCCUPATIONS IN SOCIAL SCIENCES, N.E.C. |
| V26 | 2331 | SOCIAL WORKERS |
| V26 | 2339 | OCCUPATIONS IN SOCIAL WORK AND RELATED FIELDS, N.E.C. |
| V26 | 2391 | EDUCATIONAL AND VOCATIONAL COUNSELLORS |
| V26 | 2399 | OTHER OCCUPATIONS IN SOCIAL SCIENCES AND RELATED FIELDS, N.E.C. |
| V27 | 2341 | JUDGES AND MAGISTRATES |

# APPENDIX A

## TRANSLATION INDEX
## FROM OCCUPATIONAL GROUP CODE TO CCDO CODE
## (continued)

| OCC. GROUP CODE | CCDO CODE | CCDO TITLE |
|---|---|---|
| V27 | 2343 | LAWYERS AND NOTARIES |
| V28 | 2350 | SUPERVISORS: OCCUPATIONS IN LIBRARY, MUSEUM AND ARCHIVAL SCIENCES |
| V28 | 2351 | LIBRARIANS AND ARCHIVISTS |
| V28 | 2359 | OCCUPATIONS IN LIBRARY, MUSEUM AND ARCHIVAL SCIENCES, N.E.C. |
| V30 | 2711 | UNIVERSITY TEACHERS |
| V30 | 2719 | UNIVERSITY TEACHING AND RELATED OCCUPATIONS, N.E.C. |
| V31 | 3115 | VETERINARIANS |
| V32 | 3355 | TRANSLATORS AND INTERPRETERS |
| V33 | 1133 | ADMINISTRATORS IN TEACHING AND RELATED FIELDS |
| V33 | 2731 | ELEMENTARY AND KINDERGARTEN TEACHERS |
| V33 | 2733 | SECONDARY SCHOOL TEACHERS |
| V33 | 2739 | ELEMENTARY AND SECONDARY SCHOOL TEACHING AND RELATED OCCS, N.E.C. |
| V33 | 2791 | COMMUNITY COLLEGE AND VOCATIONAL SCHOOL TEACHERS |
| V33 | 2792 | FINE ARTS TEACHERS |
| V33 | 2793 | POST-SECONDARY SCHOOL TEACHERS, N.E.C. |
| V33 | 2795 | TEACHERS OF EXCEPTIONAL STUDENTS, N.E.C. |
| V33 | 2797 | INSTRUCTORS AND TRAINING OFFICERS, N.E.C. |
| V33 | 2799 | OTHER TEACHING AND RELATED OCCUPATIONS, N.E.C. |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 1113 | T01 | ADMINISTRATORS,NEC |
| 1115 | T01 | ADMINISTRATORS,NEC |
| 1116 | L25 | INSPECTORS,GOVERNMENT & NON-GOVERNMENT |
| 1119 | T01 | ADMINISTRATORS,NEC |
| 1130 | T01 | ADMINISTRATORS,NEC |
| 1133 | V33 | NON-UNIVERSITY TEACHERS |
| 1134 | T11 | MEDICAL & HEALTH ADMINISTRATORS |
| 1135 | T12 | OFFICERS & MANAGERS, FINANCIAL |
| 1136 | T04 | PERSONNEL RELATED OCCUPATIONS |
| 1137 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 1141 | T05 | PURCHASING MANAGEMENT OCCUPATIONS |
| 1142 | T06 | HOTEL, MOTEL AND SERVICES MANAGEMENT OCCUPATIONS |
| 1143 | T07 | PRODUCTION MANAGEMENT OCCUPATIONS |
| 1145 | T08 | MANAGEMENT OCCUPATIONS,CONSTRICTION |
| 1171 | T12 | OFFICERS & MANAGERS, PERSONAL |
| 1174 | T04 | PERSONNEL RELATED OCCUPATIONS |
| 1175 | T13 | BUYERS & PURCHASERS, WHOLESALE & RETAIL TRADE |
| 1176 | L25 | INSPECTORS,GOVERNMENT & NON-GOVERNMENT |
| 2111 | V01 | CHEMISTS |
| 2112 | V02 | GEOLOGISTS |
| 2113 | V03 | PHYSICISTS |
| 2114 | V04 | METEOROLOGISTS |
| 2117 | S04 | PHYSICAL SCI'S. TECHNICIANS,TECHNOLOGISTS &RELATED |
| 2119 | S04 | PHYSICAL SCI'S. TECHNICIANS,TECHNOLOGISTS &RELATED |
| 2131 | V05 | AGRICULTURALISTS |
| 2133 | V06 | BIOLOGISTS AND RELATED SCIENTISTS |
| 2135 | S05 | LIFE SCIENSES TECHNICIANS,TECHNOLOGISTS & RELATED |
| 2139 | S05 | LIFE SCIENSES TECHNICIANS,TECHNOLOGISTS & RELATED |
| 2141 | V07 | ARCHITECTS |
| 2142 | V08 | CHEMICAL ENGINEERS |
| 2143 | V09 | CIVIL ENGINEERS |
| 2144 | V10 | ELECTRICAL ENGINEERS |
| 2145 | V11 | INDUSTRIAL ENGINEERS |
| 2147 | V13 | MECHANICAL ENGINEERS |
| 2151 | V14 | METALLURGICAL ENGINEERS |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 2153 | V15 | MINING ENGINEERS |
| 2154 | V16 | PETROLEUM ENGINEERS |
| 2155 | V17 | AEROSPACE ENGINEERS |
| 2159 | V20 | PROFESSIONAL ENGINEERS,NEC |
| 2160 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 2161 | S06 | SURVEYORS |
| 2163 | S07 | DRAFTING |
| 2165 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 2169 | S06 | SURVEYORS |
| 2181 | V21 | MATHEMATICIANS/STATISTICIANS/ACTUARIES |
| 2183 | S08 | COMPUTER PROGRAMERS |
| 2189 | V21 | MATHEMATICIANS/STATISTICIANS/ACTUARIES |
| 2311 | V22 | ECONOMISTS |
| 2313 | V23 | SOCIOLOGISTS & ANTHROPOLIGISTS |
| 2315 | V24 | PSYCHOLOGISTS |
| 2319 | V25 | SOCIAL SCIENCE OCCUPATIONS,NEC |
| 2331 | V26 | SOCIAL WORKERS & RELATED OCCUPATIONS |
| 2333 | S09 | OCCUPATIONS IN WELFARE & COMMUNITY SERVICES |
| 2339 | V26 | SOCIAL WORKERS & RELATED OCCUPATIONS |
| 2341 | V27 | JUDGES,LAWYERS & RELATED OCCUPATIONS |
| 2343 | V27 | JUDGES,LAWYERS & RELATED OCCUPATIONS |
| 2349 | S10 | OCCUPATIONS IN LAW,NEC |
| 2350 | V28 | LIBRARIANS AND RELATED OCCUPATIONS |
| 2351 | V28 | LIBRARIANS AND RELATED OCCUPATIONS |
| 2353 | S11 | LIBRARY AND MUSEUM TECHNICIANS AND SUPERVISORS |
| 2359 | V28 | LIBRARIANS AND RELATED OCCUPATIONS |
| 2391 | V26 | SOCIAL WORKERS & RELATED OCCUPATIONS |
| 2399 | V26 | SOCIAL WORKERS & RELATED OCCUPATIONS |
| 2511 | S12 | OCCUPATIONS IN RELIGION |
| 2513 | S12 | OCCUPATIONS IN RELIGION |
| 2519 | S12 | OCCUPATIONS IN RELIGION |
| 2711 | V30 | UNIVERSITY TEACHERS |
| 2719 | V30 | UNIVERSITY TEACHERS |
| 2731 | V33 | NON-UNIVERSITY TEACHERS |
| 2733 | V33 | NON-UNIVERSITY TEACHERS |

# APPENDIX B

**TRANSLATION INDEX**
**FROM CCDO CODE TO OCCUPATIONAL GROUP CODE**
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 2739 | V33 | NON-UNIVERSITY TEACHERS |
| 2791 | V33 | NON-UNIVERSITY TEACHERS |
| 2792 | V33 | NON-UNIVERSITY TEACHERS |
| 2793 | V33 | NON-UNIVERSITY TEACHERS |
| 2795 | V33 | NON-UNIVERSITY TEACHERS |
| 2797 | V33 | NON-UNIVERSITY TEACHERS |
| 2799 | V33 | NON-UNIVERSITY TEACHERS |
| 3111 | U01 | PHYSICIANS & SURGEONS |
| 3113 | U02 | DENTISTS |
| 3115 | V31 | VETERINARIANS |
| 3117 | U03 | OSTEOPATHS & CHIROPRACTORS |
| 3119 | U10 | HEALTH DIAGNOSING & TREATING OCCUPATIONS,NEC |
| 3130 | U08 | REGISTERD NURSING OCCUPATIONS |
| 3131 | U08 | REGISTERD NURSING OCCUPATIONS |
| 3133 | U22 | MEDICAL/HEALTH OCCUPATIONS,NEC |
| 3134 | U20 | NURSING ASSISTANTS AND RELATED OCCUPATIONS |
| 3137 | U11 | PHYSIO- AND OCCUPATIONAL THERAPISTS |
| 3139 | U20 | NURSING ASSISTANTS AND RELATED OCCUPATIONS |
| 3151 | U06 | PHARMACISTS |
| 3152 | U07 | DIETICIANS & NUTRITIONISTS |
| 3153 | U04 | OPTOMETRISTS |
| 3154 | U16 | DISPENSING OPTICIANS |
| 3155 | U14 | RADIOLOGICAL TECHNOLOGISTS & TECHNICIANS |
| 3156 | U12 | MEDICAL LAB TECHNICIANS & TECHNOLOGISTS |
| 3157 | U13 | DENTAL RELATED OCCUPATIONS |
| 3159 | U22 | MEDICAL/HEALTH OCCUPATIONS,NEC |
| 3311 | R05 | PAINTERS,SCULPTORS & ILLUSTRATING ARTISTS |
| 3313 | R04 | PRODUCT AND INTERIOR DESIGNERS |
| 3314 | R05 | PAINTERS,SCULPTORS & ILLUSTRATING ARTISTS |
| 3315 | S14 | PHOTOGRAPHIC AND RELATED OCCUPATIONS |
| 3330 | R02 | PERFORMING & AUDIOVISUAL ARTS RELATED OCCUPATIONS |
| 3332 | R01 | MUSICIANS AND RELATED OCCUPATIONS |
| 3333 | R01 | MUSICIANS AND RELATED OCCUPATIONS |
| 3335 | R02 | PERFORMING & AUDIOVISUAL ARTS RELATED OCCUPATIONS |
| 3337 | R02 | PERFORMING & AUDIOVISUAL ARTS RELATED OCCUPATIONS |
| 3339 | R02 | PERFORMING & AUDIOVISUAL ARTS RELATED OCCUPATIONS |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
## (continued)

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 3352 | S15 | OCCUPATIONS IN WRITING |
| 3355 | V32 | TRANSLATORS & INRERPRETERS |
| 3359 | S15 | OCCUPATIONS IN WRITING |
| 3370 | O00 | SPORT RELATED OCCUPATIONS |
| 3371 | O00 | SPORT RELATED OCCUPATIONS |
| 3373 | O00 | SPORT RELATED OCCUPATIONS |
| 3375 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 3379 | O00 | SPORT RELATED OCCUPATIONS |
| 4110 | N01 | CLERICAL OCCUPATIONS,TYPING SPECIALTY |
| 4111 | N01 | CLERICAL OCCUPATIONS,TYPING SPECIALTY |
| 4113 | N01 | CLERICAL OCCUPATIONS,TYPING SPECIALTY |
| 4130 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4131 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4133 | G06 | SALES CLERKS |
| 4135 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4137 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4139 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4140 | S17 | ELECTRONIC DATA-PROCESSING EQUIPMENT OPERATORS |
| 4141 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4143 | S17 | ELECTRONIC DATA-PROCESSING EQUIPMENT OPERATORS |
| 4150 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4151 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4153 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4155 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4157 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 4159 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 4160 | S11 | LIBRARY & MESEUM TECHNICIANS & SUPERVISORS |
| 4161 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4169 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4170 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4171 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4172 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 4173 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4175 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4177 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 4179 | N00 | CLERICAL OCCUPATIONS,GENERAL |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 4190 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4191 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 4192 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4193 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4194 | G05 | HOTEL CLERKS |
| 4195 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4197 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 4199 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 5130 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5131 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5133 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5135 | G06 | SALES CLERKS |
| 5137 | G06 | SALES CLERKS |
| 5141 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 5143 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 5145 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 5149 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5170 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5171 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5172 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5173 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5174 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5177 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5179 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5190 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 5191 | T13 | BUYERS & PURCHASERS, WHOLESALE & RETAIL TRADE |
| 5193 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 5199 | Q00 | PROFESSIONAL SALES OCCUPATIONS |
| 6111 | S19 | FIRE-FIGHTING OCCUPATIONS |
| 6112 | S20 | POLICE OCCUPATIONS |
| 6113 | S20 | POLICE OCCUPATIONS |
| 6115 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 6119 | S20 | POLICE OCCUPATIONS |
| 6120 | L01 | SUPERVISOR,FOOD & BEVERAGE PREPARATION |
| 6121 | M25 | CHEFS & COOKS |
| 6123 | G00 | WAITERS/WAITRESSES AND BARTENDERS |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 6125 | G00 | WAITERS/WAITRESSES AND BARTENDERS |
| 6129 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6130 | L02 | SUPERVISOR,ACCOMODATION |
| 6131 | T06 | HOTEL, MOTEL & SERVICE MANAGEMENT OCCUPATIONS |
| 6133 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6135 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6139 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6141 | S21 | FUNERAL DIRECTORS AND EMBALMERS |
| 6143 | G04 | HAIRDRESSERS |
| 6144 | G02 | GUIDES, HOSTESSES & STEWARDS |
| 6145 | G02 | GUIDES, HOSTESSES & STEWARDS |
| 6147 | G01 | HOME CARE & RELATED OCCUPATIONS |
| 6149 | G01 | HOME CARE & RELATED OCCUPATIONS |
| 6162 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 6165 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6169 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 6191 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6193 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 6198 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 6199 | G03 | OTHER SERVICE OCCUPATIONS, N.E.C. |
| 7112 | K01 | SKILLED FARMING OCCUPATIONS |
| 7131 | K01 | SKILLED FARMING OCCUPATIONS |
| 7180 | K01 | SKILLED FARMING OCCUPATIONS |
| 7182 | K01 | SKILLED FARMING OCCUPATIONS |
| 7195 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 7197 | K01 | SKILLED FARMING OCCUPATIONS |
| 7199 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 7311 | I07 | OFFICERS-FISHING VESSEL |
| 7313 | I06 | FISHERMEN |
| 7315 | I08 | OCCUPATIONS IN FISHING, HUNTING & TRAPPING, N.E.C. |
| 7319 | I08 | OCCUPATIONS IN FISHING, HUNTING & TRAPPING, N.E.C. |
| 7510 | K02 | SKILLED FORESTRY OCCUPATIONS |
| 7511 | K02 | SKILLED FORESTRY OCCUPATIONS |
| 7513 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 7516 | K02 | SKILLED FORESTRY OCCUPATIONS |
| 7517 | A00 | GENERAL LABOURING,HIGH STRENGTH |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 7518 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 7519 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 7710 | J02 | FOREMEN/WOMEN, MINING |
| 7711 | J06 | ROTARY WELL-DRILLING |
| 7713 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 7715 | J05 | BLASTING OCCUPATIONS |
| 7717 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 7718 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 7719 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8110 | J01 | FOREMEN/WONEN, INSPECTING,MINERAL TESTING & TREAT. |
| 8111 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8113 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8115 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8116 | J01 | FOREMEN/WOMEN,INSPECTING,MINERAL TESTING & TREAT. |
| 8118 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8119 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8130 | L05 | FOREMEN/WOMEN, INSPECTING,METAL PROCESSING & MACH. |
| 8131 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8133 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8135 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8137 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8141 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8143 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8146 | L05 | FOREMEN/WOMEN, INSPECTING,METAL PROCESSING & MACH. |
| 8148 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8149 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8151 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8153 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8155 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8158 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8159 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8160 | L07 | FOREMEN/WOMEN, INSPECTING,CHEMICALS |
| 8161 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8163 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8165 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8167 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |

# APPENDIX B

**TRANSLATION INDEX**
**FROM CCDO CODE TO OCCUPATIONAL GROUP CODE**
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 8171 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8173 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8176 | L07 | FOREMEN/WOMEN, INSPECTING,CHEMICALS |
| 8178 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8179 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8210 | L08 | FOREMEN/WOMEN, INSPECTING - FOOD & BEVERAGE PROC. |
| 8211 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8213 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8215 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8217 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8221 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8223 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8225 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8226 | L08 | FOREMEN/WOMEN, INSPECTING - FOOD & BEVERAGE PREP. |
| 8227 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8228 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8229 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8230 | L09 | FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS & PROC. |
| 8231 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8233 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8235 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8236 | L09 | FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS & PROC. |
| 8238 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8239 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8250 | L10 | FOREMEN/WOMEN, INSPECTING - PULP & PAPER |
| 8251 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8253 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8256 | L10 | FOREMEN/WOMEN, INSPECTING - PULP & PAPER |
| 8258 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8259 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8260 | L11 | FOREMEN/WOMEN, INSPECTING - TEXTILE PROCESSING |
| 8261 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8263 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8265 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8267 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8271 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |

# APPENDIX B

**TRANSLATION INDEX**
**FROM CCDO CODE TO OCCUPATIONAL GROUP CODE**
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 8273 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8275 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8276 | L11 | FOREMEN/WOMEN - INSPECTING - TEXTILE PROCESSING |
| 8278 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8279 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8293 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8295 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8298 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8299 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8310 | M01 | MACHINIST OCCUPATIONS |
| 8311 | M00 | TOOL & DIE MAKING |
| 8313 | M01 | MACHINIST OCCUPATIONS |
| 8315 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8316 | M01 | MACHINIST OCCUPATIONS |
| 8319 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8330 | M02 | SHEET METAL OCCUPATIONS |
| 8331 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8333 | M02 | SHEET METAL OCCUPATIONS |
| 8334 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8335 | M03 | WELDER |
| 8336 | M02 | SHEET METAL OCCUPATIONS |
| 8337 | M23 | BOILERMAKER, PLATER & STRUCTURAL METAL FABRICATOR |
| 8339 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8350 | L09 | FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS & PROC. |
| 8351 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8353 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8355 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8356 | L09 | FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS & PROC. |
| 8357 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8359 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8371 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8373 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8379 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8391 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8393 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8395 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
## (continued)

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 8396 | L26 | FOREMEN/WOMEN, INSPECTING - METAL PRODUCTS & MACH. |
| 8399 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8510 | L26 | FOREMEN/WOMEN,INSPECTING - METAL PRODUCTS & MECH. |
| 8511 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8513 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8515 | M21 | AIRCRAFT FABRICATING & ASSEMBLING OCCUPATIONS,NEC |
| 8523 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8525 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8526 | L26 | FOREMEN/WOMEN, INSPECTING - METAL PRODUCTS & MECH. |
| 8527 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8528 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8529 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8531 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8533 | P02 | ELECTRICAL TECHNICIANS & TECHNOLOGISTS |
| 8534 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8535 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 8537 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 8538 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8539 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8540 | L09 | FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS & PROC. |
| 8541 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8546 | L09 | FOREMEN/WOMEN, INSPECTING - WOOD PRODUCTS & PROC. |
| 8548 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8549 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8551 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8553 | M27 | TAILORS/DRESSMAKERS |
| 8555 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8557 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8561 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8562 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8563 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8568 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8569 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8570 | L17 | FOREMEN/WOMEN,INSPECTING- RUBBER & PLASTIC PRODUCT |
| 8571 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8573 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
**(continued)**

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 8575 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8576 | L17 | FOREMEN/WOMEN,INSPECTING- RUBBER & PLASTIC PRODUCT |
| 8578 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8579 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8580 | M04 | OTHER MECHANICS & REPAIRERS,NEC |
| 8581 | M05 | MOTOR-VEHICLE MECHANICS |
| 8582 | M06 | AIRCRAFT MECHANICS |
| 8583 | M07 | RAIL MECHANICS |
| 8584 | M08 | INDUSTRIAL MECHANICS |
| 8585 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 8586 | M04 | OTHER MECHANICS & REPAIRERS,NEC |
| 8587 | M22 | WATCH & CLOCK REPAIRMEN |
| 8588 | P03 | PRECISION INSTRUMENT REPAIR |
| 8589 | M04 | OTHER MECHANICS & REPAIRERS,NEC |
| 8591 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 8592 | M09 | MARINE CRAFT FABRICATING |
| 8593 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |
| 8595 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8598 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8599 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 8711 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 8713 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 8715 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 8718 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8719 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 8730 | M10 | ELECTRICAL POWER WORKERS |
| 8731 | M10 | ELECTRICAL POWER WORKERS |
| 8733 | M11 | CONSTRUCTION ELECTRICIANS |
| 8735 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 8736 | M10 | ELECTRICAL POWER WORKERS |
| 8738 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8739 | M10 | ELECTRICAL POWER WORKERS |
| 8780 | L20 | FOREMEN/WOMEN, INSPECTING - CONSTRUCTION |
| 8781 | M13 | CARPENTERS |
| 8782 | M14 | BRICKLAYERS & STONE MASONS |
| 8783 | A00 | GENERAL LABOURING,HIGH STRENGTH |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
## (continued)

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 8784 | M15 | PLASTERERS |
| 8785 | M16 | PAINTERS |
| 8786 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 8787 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8791 | M17 | PIPEFITTING/PLUMBING |
| 8793 | M18 | STRUCTURAL-METAL ERECTORS |
| 8795 | M19 | GLAZIERS |
| 8796 | L20 | FOREMEN/WOMEN, INSPECTING - CONSTRUCTION |
| 8798 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 8799 | M26 | OIL BURNER INSTALLER & REPAIRER |
| 9110 | S23 | AIR TRANSPORT SUPPORT OCCUPATIONS |
| 9111 | S22 | AIR PILOTS/FLIGHT OFFICERS/FLIGHT ENGINEERS |
| 9113 | S23 | AIR TRANSPORT SUPPORT OCCUPATIONS |
| 9119 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 9131 | M24 | LOCOMOTIVE OPERATING OCCUPATIONS |
| 9133 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 9135 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 9139 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 9151 | I05 | DECK OFFICERS |
| 9153 | I04 | ENGINE OFFICERS-SHIP |
| 9155 | I03 | DECK CREW-SHIP |
| 9157 | I01 | ENGINE CREW-SHIP |
| 9159 | I02 | WATER TRANSPORTATION,NEC |
| 9170 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9171 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9173 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9175 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9179 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9190 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9191 | H00 | DRIVING,TRUCKING & RELATED OCCUPATIONS |
| 9193 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 9199 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 9311 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 9313 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 9315 | D00 | ELEMENTAL,MACHINE RELATED,OUTDOOR |
| 9317 | C00 | ELEMENTAL,MACHINE RELATED,INDOOR |

# APPENDIX B

## TRANSLATION INDEX
## FROM CCDO CODE TO OCCUPATIONAL GROUP CODE
## (continued)

| CCDO CODE | OCC. GROUP CODE | OCCUPATIONAL GROUP TITLE |
|---|---|---|
| 9318 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 9319 | B00 | GENERAL LABOURING,LOW STRENGTH |
| 9510 | S24 | PRINTING,ENGRAVING & RELATED OCCUPATIONS |
| 9511 | S24 | PRINTING,ENGRAVING & RELATED OCCUPATIONS |
| 9512 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 9513 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 9514 | S24 | PRINTING,ENGRAVING & RELATED OCCUPATIONS |
| 9515 | S24 | PRINTING,ENGRAVING & RELATED OCCUPATIONS |
| 9517 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 9518 | A00 | GENERAL LABOURING,HIGH STRENGTH |
| 9519 | E00 | SEMI-SKILLED,MACHINE RELATED,INDOOR |
| 9530 | M20 | UTILITIES OCCUPATIONS |
| 9531 | P02 | ELECTRICAL TECHNICIANS & TECHNOLOGISTS |
| 9539 | M20 | UTILITIES OCCUPATIONS |
| 9550 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 9551 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 9553 | N00 | CLERICAL OCCUPATIONS,GENERAL |
| 9555 | S14 | PHOTOGRAPHIC AND RELATED OCCUPATIONS |
| 9557 | S26 | MOTION PICTURE PROJECTIONISTS |
| 9559 | P01 | ELECTRONIC TECHNICIANS & TECHNOLOGISTS |
| 9591 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |
| 9919 | F00 | SEMI-SKILLED OCCUPATIONS,NEC |

## APPENDIX C

## DATA SOURCES AND NOTES

### Occupational Group Title and Code

In order to cover as broad a range of occupations as possible in **Career Options** over 400 specific occupations as defined by the Canadian Classification and Dictionary of Occupations (CCDO) at the four-digit level were clustered into 150 occupational groups. This clustering of occupations involved the combination of specific four-digit CCDO occupations into occupational groups on the basis of skill, education, and training requirements. Each occupational group is assigned a unique title. For occupational groups containing only one specific four-digit CCDO occupation, the original CCDO title is generally used. For occupational groups containing more than one four-digit CCDO occupation a title was devised to reflect the types of occupations contained in the group.

For cross reference purposes each occupational group is assigned an alpha-numeric code ranging from A00 to V33. A complete translation index from occupational group code to CCDO code and from CCDO code to occupational group code is presented in Appendix A and B respectively. A list of up to five of the most significant four-digit CCDO occupations in a particular occupational group is included on the information sheets. The complete list of specific occupations in a particular occupational group is presented in Appendix A.

**Principal Duties** This section details the basic types of work performed by individuals in a particular occupational group. Information was derived from the CCDO, Statistics Canada's Standard Occupational Classification, individuals and organizations associated with the occupation, and various other counselling documents. A full listing of sources used in **Career Options** is contained in the bibliography.

**Requirements** indicates the education and/or level of training required in order to obtain employment within a particular occupational group. Requirements were determined with reference to Careers Nova Scotia, Careers Canada, and individuals and organizations associated with specific occupations.

**Training Paths** - lists the institutes which provide the education and/or training an individual should acquire in order to obtain employment in a particular occupational group. Information on training paths was obtained from vocational school and university calenders, various inventories of university courses, and Directions: An Inventory of Education and Training Offered in Nova Scotia.

### Employment Data

Occupational forecasts presented in **Career Options** are based on an updated version of the 1987 Provincial Scenario of the Canadian Occupational Projection System (COPS). COPS is a computerized occupational forecasting system developed and maintained by Employment and Immigration Canada (EIC). The Provincial Scenario was developed jointly by the Nova Scotia Regional Office of Employment and Immigration Canada (Economic Services Division), the Nova Scotia Department of Industry, Trade and Technology, and the Nova Scotia Department of Advanced Education and Job Training.

The COPS system is based on a forecast of economic activity for 62 major industries developed by the forecasting firm Informetrica Limited. These 62 industry forecasts are broken down into specific forecasts for 500 four-digit CCDO occupations through an industry/occupation matrix derived from the 1981 census.

**Estimated Employment in 1987** indicates the estimated employment level in the specific occupational group as determined through the COPS system. This estimate includes all individuals employed in the group (ie full-time and part-time workers, new entrants and fully experienced individuals).

**Employment growth from 1987 to 1995** indicates the growth rate in a particular occupational group relative to the overall projected employment growth for Nova Scotia. Above average employment growth indicates that the employment growth for the particular occupational group is more than 50% above the average for all occupations in Nova Scotia. Below average employment growth indicates that the employment growth for the particular occupation is less than half of the average for all occupations in the Province.

**Average number of new job openings** indicates the average number of new job openings likely to occur in a particular occupational group from 1987 to 1995. New job openings arise primarily due to two factors; (1) new employment growth and (2) attrition. New employment growth arises due to new firms starting up and existing firms increasing employment levels. Attrition may result from the following factors. Individuals currently employed in a particularr occupation may either change occupation, temporarily withdraw from the labour force (eg return to school), retire, or move to another province or country. In most occupations attrition account for the majority of new job openings. Attrition rates used in **Career Options** range from 2.5% to 20%. Occupations with a high attrition rate tend to be associated with a low skill level and educational requirement. Occupations with a low attrition rate tend to be associated with a high level of training.

**Unemployment Information**

The unemployment information presented in **Career Options** indicates the unemployment rate for a particular occupational group relative to the overall unemployment rate for all occupations in Nova Scotia. Unemployment rates are calculated on the basis of the number of unemployment insurance claimants in an occupation as of September 1987. It is noted that these rates are not comparable to Labour Force Survey (LFS) estimates of unemployment.

The unemployment rate for a particular occupational group may be listed as either significantly below average, below average, average, above average, or significantly above average. These ranges are defined as follows:

| | |
|---|---|
| significantly below average: | Unemployment rate is less than half the average for all occupations in Nova Scotia. |
| below average: | Unemployment rate is between 50% and 74% of the average for all occupations in Nova Scotia. |

| | |
|---|---|
| average: | average unemployment rate for all occupations in Nova Scotia plus or minus 25%. |
| above average: | Unemployment rate is between 126% and 200% of the average for all occupations in Nova Scotia. |
| significantly above average: | Unemployment rate is more than twice the average for all occupations in Nova Scotia. |

**Estimated Annual Earnings in 1987** indicates the estimated average annual earnings of full-time, full-year workers in the occupational group as of 1987. *It is noted that this figure is the average for all people in the occupation. Starting wages are generally significantly below this figure.* Earnings in 1987 are calculated on the basis of 1980 earnings adjusted for estimated income increases over the period. Earnings data for 1980 were obtained from the 1981 Census of Canada.

# BIBLIOGRAPHY


Canada. Employment and Immigration Canada. Job futures: an occupational handbook to 1992. Ottawa: Minister of Supply and Services Canada, 1986.

Canada. Employment and Immigration Canada. Canadian classification and dictionary of occupations. Ottawa: Minister of Supply and Services, 1977.

Canada. Employment and Immigration Canada. Employment Support Services Branch. College and university programs in Canada. Ottawa: Minister of Supply and Services, 1984.

Canada. Employment and Immigration Canada. National Occupational Analysis and Classification Systems Branch. Occupational Analyses Series. Ottawa: Minister of Supply and Services, 1978 -

Canada. Employment and Immigration Canada. Occupational and Career Analysis and Development Branch. Career Guidance Material Division. Careers Nova Scotia 1981. Ottawa: CEIC, 1981.

Canada. Employment and Immigration Canada. Occupational and Career Analysis and Development Branch. Careers in ... (Careers Canada series of 34 booklets). Ottawa: Supply and Services, 1975 -

Canada. Statistics Canada. Standard occupational classification 1980. Ottawa: Minister of Supply and Services, 1981.

Directory of associations in Canada, 6th edition. Brian Land, General Editor. Toronto: Micromedia Limited, 1985.

Great Britain. Manpower Services Commission. Careers and Occupational Information Centre. Occupations 86. Moorfoot, England: COIC, 1985.

Maritime Provinces Higher Education Commission. Statistical compendium. Fredericton: the Commission, 1986.

Nova Scotia. Department of Human Resources Development and Training. Youth Initiatives Office. Directions: an inventory of education and training offered in Nova Scotia 1985-86. Halifax: the Department, 1985.

Nova Scotia. Department of Vocational and Technical Training. Youth Initiatives Office. Directions: an inventory of education and training offered in Nova Scotia 1987. Halifax: the Department, 1987.

University of Toronto. Guidance Centre. Atlantic spectrum '88. Toronto: Guidance Centre, 1987.

_____. _____. Ontario spectrum '87. Toronto: Guidance Centre, 1986.

_____. _____. Quebec spectrum '88. Toronto: Guidance Centre, 1987.

_____. _____. Western spectrum '87. Toronto: Guidance Centre, 1986.

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